



BIRDS AND FLOWERS.

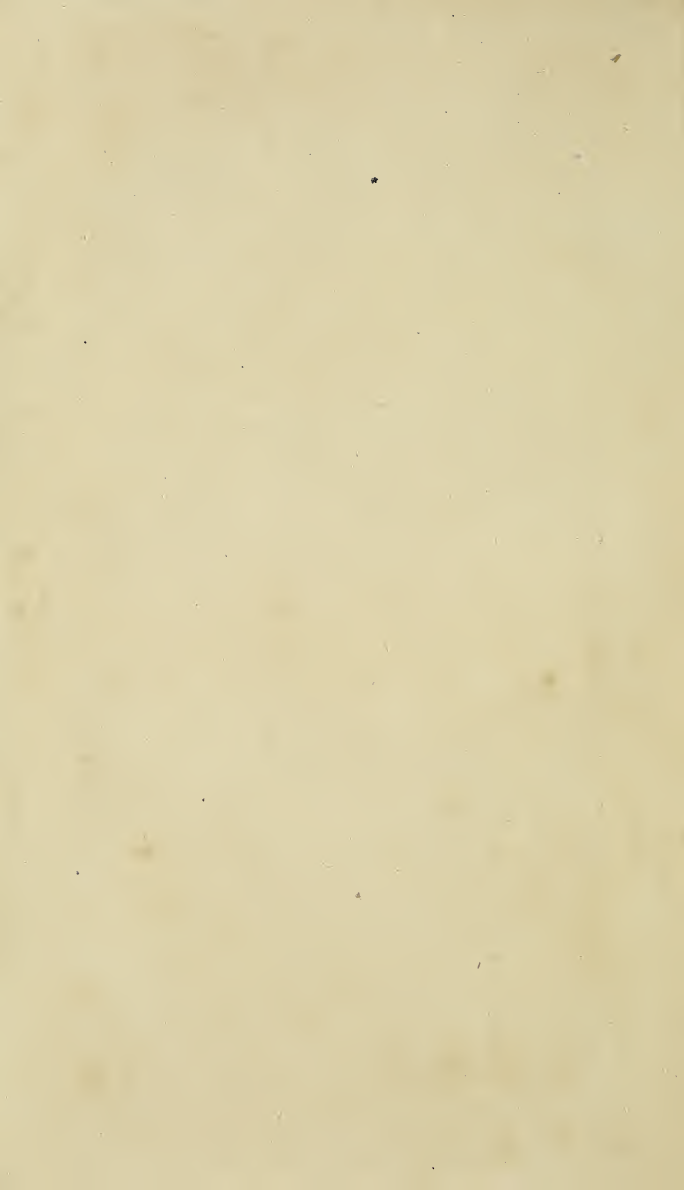
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BIRDS AND FLOWERS;

OR,

THE CHILDREN'S GUIDE

TO

Gardening and Bird-Keeping.

BY THE AUTHOR OF "CRAGSTONE COTTAGE," "IN-DOOR PLANTS,"

ETC., ETC.

With a Frontispiece.



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BIRDS AND FLOWERS;

OR, THE

Children's Guide to Gardening and Bird-Keeping.

PART I.

F L O W E R S.

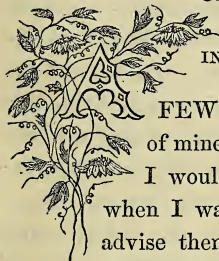
THE YOUNG GARDENER;

OR,

The Children's Gardening Guide.

CHAPTER I.

INTRODUCTORY.



FEW days ago, three young friends of mine made an urgent request that I would tell them about my garden when I was a child, and that I would advise them also how to manage theirs.

And so it struck me that a book about small gardens might really be very welcome.

I remember indeed, when we all were children, what work we had to find anything described in books small enough for our wants. Once we read all the chapters that spoke of "Cottage Gardens," because we calculated that they must be small! But, alas! we found that turnips and potatoes were

the plants chiefly treated of. Many an hour afterwards in the long winter evenings we pored over "Mawe's Gardening," but that was an old-fashioned and a very solid work, and we did not make much out of it. After awhile, however, we were enchanted by a present that we received of a book called "Mrs. Loudon's Gardening for Ladies." Oh, how charmed we were—I have still got the book. But after all it was a great way beyond such limited wants as ours; the fine long names besides were always so very tempting, and led us into trouble. I do not like them now, because we soon discovered that the best things get pet names; and I have too gone back again to think, with most children, that the commonest things are nicest, so that we need not scout a Primrose or a Blue-bell—no, nor the wild Geranium, although they are very common.

Why, if we talk of common, the double white Narcissus grew wild in our own fields. Lilies of the Valley carpeted the woods, and the loveliest pink Violets that I remember anywhere grew on a limestone rock just above the quarry. And there was also a Hawthorn-tree, it was a pink one, and you should have seen the Violets that clustered around its root!

Do you want to grow specially fragrant Violets?

In that case try what some bits of old mortar or some nice broken limestone will do on your behalf, all nicely pounded up and mixed with the soil all ready—and then plant the Violets on a nice warm dry bank, where, nevertheless, they can get a little shade, such as a wild Rose gives, or a tuft of dry soft grass. (The nicest wild Violets always nestle into a clump of grass.)

I cannot tell for certain; but I guess that if some people do all this, they will be sure to find nice sweet Violets some day.

But now I am reminded that we must “begin at the beginning, and go on quite regularly all through the year,” and describe in its proper order all that there is to do in laying out the garden and keeping it in fine order.



CHAPTER II.

WHAT THE GARDEN IS LIKE.

It may be all very well for people who have got gardens, and who know exactly what they are like

already, but I cannot believe my three young friends are right when they say “please go on, and never mind describing what the garden is; we only want, you know, to know just what to do with it.” No, before I begin I will describe what gardens may be made like.

One of our gardens was a long narrow border, with a gravel walk all along, and that was edged with Box, which did not answer nicely because we were always treading on it.

Another time we had a round bed on the lawn, and that was nice, because little round beds hold a great many flowers; and again I remember having a three-cornered bed, with a little hedge of pale pink Roses round it—such early Roses they were too—and my sister and I used to have to kneel down quite close on the grass to smell them; and there was a bed of Roses close by full of sweet white Lilies; and another too, with great large purple Violets, growing close all round. One early spring, when I was a little girl, I had the scarlet fever, and the first day I was better and they carried me to the window, what should I see but quite a mat of purple—the Violets all in blossom; for I had been so ill, no one had been there to gather them! very soon indeed I coaxed a housemaid to make a

foray for me, and, oh! the heaps of wet Violets that were caught upon my bed!

Perhaps, however, our very best, at least our completest garden, was one that was made for us by a goodnatured grown-up cousin, and I think, if I tell you all about it, some of you will manage famously to make one something like it.

It was then, at first, a piece of ground about twenty steps from one end to the other. The back was a shrubbery, and the front was a lawn, and in the shrubbery there was what we called a goose-apple-tree, with great large apples that were not very good to eat, though the cook always snapped at them to make into apple sauce. Well, our domain was along this shrubbery, and we had also a piece of lawn in front about as far as two people could reach if they took hold of hands and stretched out their arms across.

Quite large enough that was, you will allow, I think, for such little people as we were then to manage.

Well, the great thing is, as everybody knows, to make a garden all quite complete to itself, a hedge all round it, and a gate to go in by! Don't people feel independent when they have such a pleasure ground? Ours had just such a hedge, all covered

with blue *Convolvulus*, Sweet-peas and *Nasturtiums*; and do you know indeed, though I am a grown-up woman now, I would exceedingly like again to have such a garden. So you see that grown-up people do not at all despise a real nice child's garden.

Shall we suppose that all my readers have got a piece of ground, something between six steps long and twenty? Only if you have a choice as to where that is to be, mind be sure and don't get a place which is always shady. A little bit of ground where the sun shines in the afternoon after two o'clock, or early in the morning, is perhaps the very nicest, and in such a place, if sheltered, you will have the earliest flowers.

I cannot help making one suggestion here; every one knows how very awkward it is to have to do all "our untidy work," making our heaps of stones, and stands of flower-pots, and beds of seedlings, and perhaps keeping our hand-glasses, in our only garden.

This is a thing that troubles grown-up gardeners quite as much as younger ones, only young gardeners more generally are much limited as to space.

Now I cannot help thinking that however small

a garden is, it still may be possible to screen off the untidy part. Some people do this by making a tallish cross-fence, and covering it with some creeper that shuts out the view of a scrap of ground at the back. Others again keep the garden generally in no specially ornamental state, which latter is often the case where there are a good many small gardens, but then they devote themselves to some one particular little bed or corner, into which they put everything that is prettiest, and which they often shut in by some little fence to itself. These atoms of gardens I have seen look lovely. You know beauty does not consist in being great; and so a little garden of a few feet square may be in itself as beautiful and as complete as one of a few acres. We gave, I remember, one of the two flower-beds that I shall soon describe to one of our governesses, who was very fond of flowers, and she used to go and garden very busily, and always made it look quite a mass of flowers; she was a capital gardener, and used to teach us all quantities of things about plants and gardening, while her own bed was as pretty as it could have been in a ten times larger garden. For people then who want to have a really lovely garden, no matter how small it may be, I greatly

would recommend a trellis or cross-stick fence, that gives a narrow border; or a circular bed surrounded by a creeper-grown fence of the same description; or even a corner, *providing it faces either south or west*, in which they may make a tiny garden within a garden.

I shall hereafter give a few hints occasionally for this especial little nook of flowers. But what month shall we begin with?

Well, do you know, I think March will do best, because people take houses often at Lady-day, and doubtless, therefore, that is the time when you will take your garden. Besides, before March perhaps you would not do much good.

Do you like a garden to be full or empty when you get it? I rather like it empty because then it has all to be done.

The first thing, of course, will be:—1. To lay out the garden. 2. To put the ground into planting order. 3. To keep it always full and neat. The first of these three things has to be done once for all. So I will give a few chapters on these arrangements which may of course be missed by people who have got their gardens already laid out nicely, and who do not want to alter them.

The second also may or may not be wanted.

Some people are fond of shirking all the work and making a small show cheaply. And these perhaps will have got the garden dug and put in regular order, and I should not wonder if it even were planted for them. For my own part, I always liked to do all the work myself, and for people who like it also I have described as clearly as possible how they should set about it. People can generally find some one who will wheel them a heavy load, or give the last tug to some tough tree that does not choose to stir for all our digging ; and for the raking, and forking, and hoeing, and weeding, and even the digging mostly, it strikes me, the more we do of it the more we enjoy our gardens, and the prettier we think our flowers are when they come.

The third concerns the keeping our gardens gay, sowing seeds too and raising cuttings for them.

All this is work varying with the months, so for this we will have a kind of monthly Kalendar, or list of operations. And as Spring begins in March, we will begin then also, and see what we have to do.

CHAPTER III.

LAYING OUT A SQUARE GARDEN WITH A RUSTIC
FENCE AND GATE.

SUPPOSE then, now, that we have each a garden, twelve steps long by about the same width in all, stretching from a shrubbery out into the lawn. The ground in front of the shrubs is capital for a kitchen garden, and on the slip of lawn we will lay out our flower beds. The question is, what shape are they to be made? Because I know that a round bed or a diamond has a more grown-up look about it, and all sorts of little shapes and twists might really imitate a scrap of a great garden. Gravel walks, say some, and with little beds in between; and that, no doubt, does very well indeed in places where grass will not grow, but where people can have grass, I beg to assure them they can have nothing better.

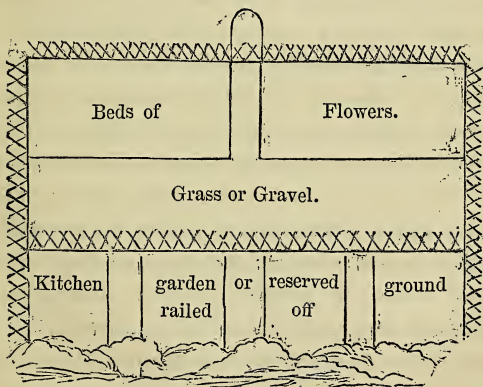
Now for this piece of grass—how nice and smooth it is, and what heaps of those pretty three-

lobed clover leaves. Before we lay it out let us make a plan on paper.

That is work for a wet day in-doors.

If the garden is twelve feet long and six feet wide, get twelve little squares marked out upon the paper, and six rows more behind them, and then each square will be a foot of ground, and if we want to be very grand we may call them acres! Suppose the paper is all nicely marked out in squares, the next thing is to fix how to make the beds. Our prettiest garden was just like this first pattern; (Fig. 1;) the beds were

Fig. 1.



placed straight along the front, about six feet long and three feet wide, and in the middle there was a sort of arch.

The garden, I must tell you, was hedged in all round with the prettiest fence that I ever saw. Perhaps you know what the Midland County people generally call "sallies"—they look to me like stout willow sticks, which I expect they are.

Well, our garden was fenced all the way round with these nice smooth-barked willows. The little posts were cut much about the same size, and hammered into the ground one across the other, standing, perhaps, about eighteen inches high. In the middle, I was saying, just between the beds, came a pretty arch, which was of willow also, and which had fixed to it a pretty little gate. Was it not grand to possess an archway and to have a real gate to go in and out by? We called it a drawbridge, and a moat, and a portcullis, and I do not know what besides; but hearing one day that all our names were wrong, and that portcullises were gratings, and that drawbridges were real bridges, and not mere pretty arches, and that moats were ditches always full of water, we were really for ten minutes almost in despair.

After that we got happier, for the bright thought struck us that we would have a moat; and a splendid deep hole we dug, although the turf was hard. But really, old John was extremely angry! He said that such young ladies he did never know, and he even threatened to give us no more flower-seeds and to lock up the tool-house when we wanted to get light rakes. I fear young ladies *are* sad plagues to gardeners!

However, with our experience of John's indignation, you see I should be wrong to advise you to dig a moat.

For ourselves, we took to a portcullis, and as we had just read *Marmion* it all came very pat.

The portcullis, however, is rather an awkward thing—it is so apt either not to fall when we wish it would, or else, being down, it may refuse to rise; and when people's gardens are so strongly fortified, it sounds unreasonable, though possible, to clear the walls in a flying leap!

For my own part, if the time were to come again, I think that a gate might, after all, answer best.

Some of us are sure to have packthread, and very likely some bits of good stout cord, or even of strongish wire; cord does best though.

We measure how wide exactly our great doorway is, perhaps it may be three feet, and then we take two sticks just as long as that, and two more sticks the same height as the paling ; and all these four we tie together tightly into a kind of frame, afterwards fastening two more sticks across. If it is all done firmly, really, you cannot think what a nice little gate it makes ! And then with some list, or a piece of leather, (we coaxed a piece of a leathern belt out of a kind nurse,)—the door should be “hung”—the leather, you understand, being passed round the frame of the outer part of the arch, so as to keep the two together, and the door swings on this quite well—better even than it would do on a proper hinge. Of course doors must shut—though I confess it is a use they have which is apt to be forgotten by people in a great hurry. But in this case I will describe a latch. The willow sticks, as every one knows who ever saw a basket made, bend extremely well ; we therefore tie a piece of string to one of our strongest posts, and bending the willow stick, which should be six inches long, we tie the ends tightly together round our door-post, so as to leave the stick just hanging like a loop. Then for the hook. That is rather difficult. We sometimes

were impatient and got a stick from the heap that was piled up for pea-sticks, and cut it with a straight hook to it, just at the end. But that may not



answer, as they are apt to be dry and rotten. The proper thing is to hunt out a proper ash-stick, one of those nice supple shoots which spring up from a root, and then cutting it off just where it springs out with a nice curve from the root, we use the curve of that for the best hook possible. Most boys, and perhaps some girls, know where to get such sticks !

This stick can be tied at one end to the gate, so that it can be raised and hooked into the loop—and then you see your gate is quite secure. It has also a charmingly rustic look.

But I have not yet told you how to make the arch.

For this we should begin with four stoutish posts driven firmly in at the corners. (Two of these must be used, you know, for the gate-posts.)

Having hammered these in very tightly, and perhaps got one of the gardeners to give a good thump at the top of each, we must get some nice

easily-bent willows for the upper part—binding down the ends firmly to the posts, and making the bent sticks long enough to make a pretty arch.

Some people put three of these frames, and then they lace sticks through them, which makes the arch much closer.

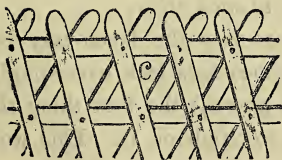
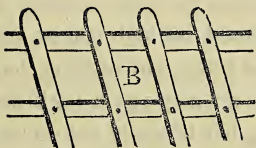
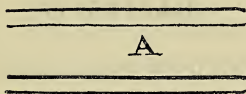
Ours was done in this way, and quite the first year we had it the creepers grew all over it.

I really think most people could make something quite as nice as ours—and ours looked pretty even in the winter, because it was not mere ugly bits of lath and stick, but most of the posts took root and made quite a pretty fence.

When people cannot get willows, however, of which to make the fences, a boy who knows how to carpenter can make a dark green trellis which is also very nice and pretty.

A good rough sort is made of two long bars of wood laid parallel with each other, like A in figure 2, and then a set of laths are nailed across to each, like B, and then another set are nailed the other way, like C. This plan is much more elaborate than the other and requires a good workman to make it strong and proper. A regular carpenter would use thick square pieces of wood at A, and cut the places for the cross laths to fit in.

Fig. 2.



CHAPTER IV.

ROUND GARDEN.

ANOTHER very pretty garden plan is to have a *round* piece fenced in as I described, with the sticks set crossways, or with a wire fence, which is excessively nice, only that we cannot make it ourselves. When we have a cross fence I think the garden should be laid out on turf—anything rustic, like that rough sort of fence, looks best with grass—just as we may put a bark flower-box out upon the lawn, but it would not do well to have it in the house, or on a marble terrace. If you want to have your gardens really nice, and made in good taste, you will be very careful to have things that look *suitable to each other*.

In whatever way the fence may be arranged, (and a wire fence does look exceedingly well both on grass and gravel,) the first thing should be to plant things to climb on it. This we will speak of in describing the work for March.

My own idea for such a circular garden would

be to have a certain number of beds laid out all round the edge; when there are to be five or six separate gardens, we may make five or six beds only then it is extremely likely that the gardeners will have to be very kind in helping one another, and if some of the younger florists help the elders in things that they can do, it is only fair that they should be helped in turn to keep their gardens nice, and not to disgrace the good condition of the general plot.

When people want to have something between each bed, they may have an arbour opposite to the gate, if the gate is itself arched over; or they may have poles or arches between each pair of beds, which look exceedingly pretty for climbing plants to grow on. And for the centre, they may have either a large round bed of flowers, or a wire enclosure for keeping any pets, or a rustic arbour, for which I will hereafter describe a plan that I have seen look charming. There are plenty of things I am sure, to settle, in the mere shapes of the flower-beds, and if we get some pieces of coloured paper and cut them out in shapes, we can lay them on green paper and see how they will look.

It is extremely puzzling at first to manage this, but you cannot think how amusing it is at last,

when you understand it. I am really quite afraid myself of beginning to make garden plans. I think it is so pleasant that I quite forget to stop. Now I will try to describe to you how to do it, and the first wet day, when you cannot go out, I greatly advise you to take your paper and scissors and see what you can do. Whatever shape you mean your whole garden to be, you must get it measured to know how large it is both ways.

We will suppose that you are to have a piece of ground in one corner of some lawn, just twelve yards across and exactly round. All round things, you know, are exactly three times as long round as they are across, so this garden of yours will be thirty-six yards round.

I think myself you would find a much smaller piece answer well, for I always fancy it is nicer to have one bed beautiful, instead of twelve untidy. However, the size is a question that I have not got to decide. Whatever that size is, you had better take two pieces of paper, one red or white, and the other green. Measure across the paper exactly as many inches as you have yards or feet of garden. If the garden is large you can count an inch to a yard; if it is small, you may say an inch to a foot. This is called *the scale*. Counting your garden

twelve yards across, and the scale being an inch to a yard, your paper will be, you see, just twelve inches or a foot across. That would take a yard of ribbon to go round it. You must remember this ; because if you make your garden very large, and the fence is to go all round, it will not be a small piece of work to make it, nor would it be inexpensive if you mean to buy wire fencing. So remember that for every extra yard that the ground is across, you will have three yards more to go round the edge.

The paper when thus measured has to be cut round. Perhaps you have some compasses, or know how to do this ; if not, fold the paper exactly in four, and measure *half* your number of inches along each edge, as in Fig. A, and then measuring



a string exactly the same length, say six inches, hold one corner tight at the point *b*, and draw the other end round from *c* to *d*, with a pin just pricking the paper as it passes.

You can keep the green circle to represent your grass, and then out of the red one you may make all sorts of shapes ; when you lay these shapes cut

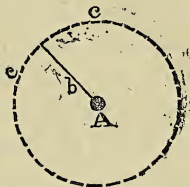
out on the green paper, you can guess a little how your beds of flowers will look at last upon the grass itself. And again, if you would like to have a border all round the edge, except where the gate is, and either one large bed, or a set of little beds together, in the centre, you might get several coloured wafers and put them on your green paper, and see how they would look.

Or you may, if you like it, have a square rustic arbour in the centre, and at every corner-post have a round bed of flowers, out of which a corner would of course be taken on the arbour side. This is extremely pretty with Pillar Roses growing up the post that goes at the corner, and bushy plants and evergreens in each of the beds at the side next the arbour. The same plan will answer in marking out your garden on the ground as that which you adopted in making the paper pattern.

You measure the length one way, halve it, and mark the middle. Measure the length the other way, halve it again, and again mark the middle. You must manage so that the middle of each shall be marked by the same stick, and that will be the middle of your plot.

Having got the middle fixed for you, you must

tie a string to a short piece of stick, making the string exactly half the diameter of your garden. You know, of course, that "the diameter" means the length across a round thing. A piece of string exactly half the length of that diameter, tied to a peg stuck in the ground in the centre, and drawn all round the edge, kept as tight as it will go, will mark you out your circle. *A* is the peg stuck into the ground, *b* the string, and *c* the circle that it is marking out.



The stick-and-string plan that I have described answers well for all sorts of round things that you have to measure, whether large or small, and by having rather a thick peg to stick into the ground in the middle, you can easily wind up part of the string when you want it shorter.

When in marking a circle you come to a tree or anything that is in the way, you must go on just till the string touches the stem, then put a stick or stone, just to keep your place, and go round the tree and begin again on the other side as close as you can, that is, just where the string *touches* it, without being bent by it, on the other side. You

will afterwards have to draw a line to the new place from where you left off before.

I strongly advise people to have all their own tools and measuring things, as much as they can separate. It is such nice rainy-day work to make and mark our measuring lines, and to cut little pegs and labels, and collect bits of list and half-untwisted twine, and strips of leather, and all such sort of things, and gardeners are always a great deal more good-natured when we really want them if we are thus independent, and do not keep running every ten minutes to hunt and fetch some new tool we want, which the chances are some people forget entirely to carry back when done with.



CHAPTER V.

MAKING AN ARBOUR.

THERE are so many ways of making a rustic summer-house, or arbour, that I hardly know which to describe the first. Tall green boughs, stuck in and bent together, make a nice gipsy-tent for a birthday feast; and that is the first arbour that I can remember helping to construct. Tall willow-sticks, bound over, and covered with climbing plants, are again very pretty. Yew-trees, trained out over a rough wooden frame, make a perfect shelter from the heaviest shower, and a delightfully thick and close-growing wall of green. Living shrubs, interlaced, make also roofs and walls; a few stout posts being ample for keeping them in their places. And, lastly, a rough trellis-work of sticks crossed and re-crossed, and overgrown with flowers and with Ivy, makes a perfect picture of a summer-bower.

I like the latter plan so very much the best, that it is the one that I will now describe, for I

think after making it the others will all come easy.

The first thing, then, is to plant four, or six stout corner-posts—according to the most wished-for shape. Young Larch-trees do best, and they may keep their bark on.

Now and then there happen to be four trees growing in proper places, such as we can use; then the only thing would be to cut the tops and branches off; but this, I think, seldom happens except in desert islands!

Having got, then, four stout larch-posts, about one-third taller than we wish to make our ceiling, the next thing we have to do will be to sharpen the points that they may go into the ground, and to dip the ends into pitch that they may not decay. These posts then have to be driven into the ground *very* firmly indeed, and we must always mind that the distances are equal, and that our walls stand straight. The next thing should be to get some more larch-posts, split in two, and to nail them firmly, or let them into notches, from side-post to side-post.

Supposing it to be a six-sided bower, and that you do not wish to have it rain-proof, you will next fasten crossbars from one side-post to the

next but one, and so on, till all three are on ; and then do the same again, taking the posts that you missed the first time. Long tough willow-stems do the best for this ; and having fastened, or tied a few with good strong tarred twine, like the sailors use on board ship, you may weave in the rest. Tarred cord, I must remind you, is not to be much used ; it is useful in gardens because a ring of it round a tree keeps hares and insects away ; but in a flower-garden it should never be used where it can brush against people, as it stains their clothes. If you want, however, to preserve your string, and keep your house in repair, you will paint over the cord you use with a little dark green paint, when it is used low down.

The roof then has to be all wattled over. You can fancy easily how to work the willows, or “sallies,” in and out, making a nice firm trellis. If you really are so ambitious as to wish the roof to be waterproof, you must make the said framework very close indeed, and then you can lay on it a quantity of green moss, with the green side downwards ; and then nail a piece of felt on, and cover that again with a fresh moss thatching, or even with one of straw. These roofs are very useful, but not half so pretty as a mere rustic

shade ; and if your garden is very near the house, I think it is a pity to spoil the looks for such a doubtful pleasure. The roof requires, too, to be much higher on one side than on the other when you have it waterproof, and this sadly does away with the pretty Italian or Japanese square trellis.

I think that flower-gardens are mere summer pleasures, and in summer we want shade chiefly. In full view of the house, at any rate, you do not want a summer-house ; so unless you are far away I am an advocate of the trellis plan, which is done so easily and always looks so nice.

Having made your roof, you next may construct the walls, which is quite reversing all proper house-building order. Nothing hardly is prettier than a crossed fence here again—a row of long sticks leaning one way, and another row going the other, on three of the sides of the six-sided bower. The interstices can be as large or as small as you like—or I *have* seen such bowers looking extremely pretty without any walls at all, and only surrounded by the six green pillars. It is an important question what to plant by these pillars.

I think myself that each should have something evergreen, and then any extra flowers make it

immensely gay. Many people like to have Ivy, for when it grows well nothing looks prettier both in summer and winter; and there is also a delightful Evergreen Rose which does well in warm places; or you might have an evergreen shrub planted at each corner, besides many other things. Privet is very pretty and makes a beautiful close green; I think it is quite a shame that it is so turned out of flower-gardens, for unless Myrtles grow well, as they do in the Isle of Wight, few plants are greener.

A pretty Box-tree would do well here, too, or a little Holly very well indeed, and then you would have at Christmas Holly and Ivy of your own peculiar growth. You ought to plant some evergreens if you mean to have a garden full of spring-flowers in the early spring, which I would not miss for anything. Then there should be a Vine, and perhaps a Virginian-Creeper, which grows very quickly and has red leaves in autumn which hang on amidst the Ivy for a long while sometimes.

The Ivy itself does not always grow very fast. People seem to fancy that it will grow anywhere and does not want any care—which is a great mistake. If it were planted in plenty of good

leaf-mould, like that which it would meet with under the trees in woods, and up against old walls, where heaps of leaves have laid till they have decayed, and if it were kept well watered, it would grow a great deal quicker—and cover all the frame-work in about half the time it takes when left alone. Have you ever noticed the pink China Roses growing amidst dark Ivy and peeping out here and there? Even in the winter they will often look so pretty—and if any one should chance to have a tall Holly-tree, or an Ivy-grown wall, by which they can plant a flower, I much advise them to put in a China Rose—and some roots of great white Convolvulus, of the kind called Calystegia.

Sweet Peas sown in-doors in January, and also Nasturtiums and Canariensis sown in the ground in autumn, will make a great show even the first year, and Cobia Scandens also being sown in-doors in pots may be grown quite spreading in time to plant out in May.

Jessamines too and Honeysuckles do beautifully—indeed, the prettiest quite that I have ever seen of these trellised bowers have been covered with Ivy, with Roses, and Honeysuckles, and perhaps a Vine and Clematis, or White Jessamine.

The Vine should be cut back a little in each autumn—because then the young shoots in spring will be greener and closer.

Of course, when the trellis is covered you will want some seats and, I dare say, a table. It would be a charming plan to have, instead of a table only, a bark basket containing growing Ferns. And the seat could be made of twisted branches too—or some wicker chairs might be painted green or brown. You would find *brown* look best because it is the colour of bark, while green seems to try to look like leaves and can't manage it.

The basket of Ferns would thrive most charmingly in the shade, and I am sure you would quite delight in each new place you went to in collecting new Ferns to add to those growing in it.

I may just add a hint that many little plants which grow on walls and in clefts of trees would also look very pretty on the roof of your garden-house.



CHAPTER VI.

FLOWERS.

It is a great thing to know what flowers are best to grow.

A great many kinds may be very pretty and yet out of the question for gardens like our own, on account of peculiar treatment that they may require, or of the long time required in their growth *for flowering*. A sad cause of grief the latter point is to a great many young gardeners. How well I remember poring by the hour over fine lists of seeds. Who would ever have thought that some of those seeds would produce forest trees, and that even many shrubs then sown would not have flowered yet!

If I were a young gardener just setting up again, I would avoid the seed-lists and their temptations, and make it quite a rule to grow things that *I knew*. Of course, now and then one might have some experimental seeds—but for my own positive wants I would have such flowers as I had

already seen and thought would be suitable, or such as I was told of by some one who understood.

Spring flowers certainly never can be unwelcome.

Cloth of Gold Crocus is a delightful hardy kind, peeping out, I think, amongst the very earliest, and always so very welcome with its yellow coat striped with brown. The little Scotch Crocus is another early hardy one, and Versicolor is another, with less of white and more of purple than the Scotch kind has.

Of larger and finer sorts there is a great variety. Mary Stuart, La Neige, and Queen Victoria are very good white kinds, and Uranus and Sir Walter Scott are very fine large purple ones.

There are also large yellow, and large pale primrose kinds. But these larger sorts I prefer, myself, for baskets and window gardens—the little hardy things do so well outside, and make the beds so gay. Besides, they are very cheap, which is a consideration, though Crocuses are things that do go on increasing year after year delightfully.

Snowdrops, again, are things of which you cannot have too many—but I daresay you will be shocked at my liking Daffodils—and perhaps they *are* more fit for a border than for a bed.

Then for the perennials; that is, the plants which live on for years. You ought to have some Hepaticas, with their pretty red and blue flowers, and some hardy Heaths, and some Violets, and a great many double Primroses, yellow, and white, and lilac. There should be, too, some Wall-flowers, because they smell so sweet, and if you keep them low and bushy they make pretty evergreens. You can also have some blue Periwinkles.

Anemones sometimes will blossom quite in the winter, and when they do they are very pretty—and a most charming plant again is the Auricula, with its white powdery leaves which look as if they had been dusted in a flour mill! I always was very fond of the Auricula—not to keep in a frame, but for a garden plant; and though the white, and yellow, and dark maroon Auriculas may not be the finest sorts, they seem to me delightful, and well deserve the little room they take up in the border.

Amongst the shrubs in blossom are Almonds and sweet Daphnes. Then there is the blue Gentian, which is very beautiful, and with which I had once a little round bed filled, so that it looked most brilliant—this, however, blossoms later than the things already mentioned.

About April, too, there are the many Tulips, the Hyacinth and Scilla, the Jonquille and Narcissus; these are all hardy bulbs that will flower delightfully.

A very great prize indeed is an Azalea or a plant perhaps of some hardy Rhododendron. The Ribes, or Flowering Currant, again, is very pretty; and who does not like a double-flowering Gorze, with its warm sweet scent and the hum of the bees that haunt it.

Sweetbriars, again, should be in every garden; scarlet and pink Thorns are also pretty things—they grow to be lovely trees with their waving wreaths of bloom.

Lilies of the Valley deserve to be well remembered, and they will grow under shrubs. Their bells begin to open just when the Cuckoo comes, so that I can remember sometimes hearing the Cuckoo first, just while I was busy seeking to find a Lily.

The great purple double Violets come later than the single ones so as to keep our gardens for a long while scented.

Roses are beginning long before Violets go, and the Stocks and Larkspurs, Lilies and Irises, Campanulas and Carnations, Geraniums and Ver-

benas, Heliotropes and Fuchsias, follow closely after.

For the walls and fences too, the Honeysuckle is charming, and it puts out its leaves early and wears late its coral berries when the sweet yellow flowers are gone or have not yet come on ; the Clematis, too, makes a bright green mantle with blossoms of white or blue ; and perennial flowers of the Convolvulus kind make wreaths of dark green leaves with white or purple bells, or with bright pink flowers. Cobea Scandens, again, is a nice sort of creeper, which goes on year after year, dying down in winter and springing up again, as if self-sown, in spring.

Jasmine is very sweet and extremely green ;— and amongst the annuals that we sow, there are many things that rapidly tell on fences and make them gay with flowers. There are Sweet Peas, for instance, and Convolvulus Major, Canary-bird Flower or Canariensis, Nasturtiums, of the dark kinds especially, Maurandias and Lophospernum, all of which are suitable and all of which, except the last two, will grow if sown in autumn or early spring without any heat at all. The Maurandia Barclayana, Lophospernum, and Ipamea Quomoclit and Rubra Cerulea, (which are like different-

coloured Convolvulus, very gay and pretty,) require a little heat, and must be raised indoors or else in a slight hotbed.

No one can ever sow too much Mignonette—if I had my will it should fill the gaps and spaces in every mixed border, and should grow at the feet of the climbers upon our fence, and on our rustic summer-house. The pretty little Anagallis is another flower to sow, and then there are the Larkspurs, Candytufts, Veronicas, and Minor Convolvulus, with their beautiful blue colour, Tropælium or “Tom Thumb” Nasturtiums, the French Poppies, the Nemophilas, Campanulas, Lupines, and Lobelias, and, later in the year, the dwarf French and German Asters, all being useful to make the garden gay. In a little warmth we may sow many of these seeds early to have a second series of their pretty flowers.

When the annuals are over, or when their chief beauty is past, we may have Chrysanthemums, and these, if grown from cuttings, often make nice dwarf-growing little plants. But towards November even the Dahlias vanish altogether, and for the last two months of each year we are only pleased if we find *any* flowers.

Laurustinus is sometimes pretty in the borders,

and the red *Arbutus* berries also look very gay—but the hardy China Roses make themselves valued then, and they often come peering out from amidst a wall of green, and give a sweet autumn scent as they mix with the *Mignonette* which lingers in drier spots.



CHAPTER VII.

WINDOW GARDENING.

I OFTEN think that our little stands and window-sills that are bright with flowers in winter are even a greater pleasure than the many plants which blossom a few months later and each one of which is not so very precious. If we want to have these, however, we must think of it in the autumn, for the earlier after August that we get in our bulbs, the earlier in the winter will the flowers come out. In the wintry months I shall give some hints on window gardening, and I strongly advise you now to be very early in filling glass

pans, or soup-plates, or china bowls, and in planting flower-pots full, as well as in placing some of your roots in water-glasses.

The kinds I use myself are *single* Hyacinths only, and of these I like particularly the *Miniature* or *Bouquet* Hyacinths, which grow about four or five inches high and are most exceedingly pretty.

I always have a great many of these, blue, and white, and pink—and then have a good many also of the large fine kinds, which grow up like pillars of flowers and are *very* beautiful. Then there are dwarf Tulips, little brilliant flowers with the most delicious scent, and the lovely Snowdrops with their bending heads, and the little bright blue Scillas, which you would, I am sure, agree with me in calling little beauties. Crocuses too are very nice to have, if you have room to spare, and the large white and purple kinds are the best in that case.

Narcissus Bulbocodium is a pretty bright yellow flower with long green grassy leaves, and the Cyclamen Persicum, with its white, red-spotted flowers, is a perfect gem.

The Hyacinths cost about three shillings a dozen, the Tulips are much cheaper still, and the

Scillas are about a penny a piece. So we may fill a window without any great expense. My own plan is to place a number of pieces of charcoal at the bottom of a glass milk-pan or in a china dish, and then to put a little moist sand on this. Then I fill the dish nearly full of dry sand, and place the bulbs upon it, just pressing the sand down gently.

If water-glasses or soup-plates are used, the bulbs should only *just* touch the water, indeed *scarcely* to touch at all for the first start.

When pots of soil are used, the pots (about four or five inches wide) should be drained with charcoal, with a little moss laid over it, and then the soil should be mixed with sand and put in extremely loosely. The bulb should be put to stand upon the soil, and then more soil and sand should be pressed on rather firmly, or the pots should be sunk in a deepish bed of ashes or of sand if they are out of doors.

The Hyacinths, however, are ten times prettier when we plant three or four in the same pot together. A dish containing seven or eight small Hyacinths and a few Snowdrops and little Scillas is most delightful. These make the most charming nosegays of pink, and blue, and white.

Having put in the bulbs, they must next be shut up in a perfectly cool dark place. A shelf in some cupboard does very well, but there must not be *any* light, even through a keyhole. The place where my bulbs grow best is in a perfectly dark sort of wood or broom-closet, underneath some stairs, and last autumn I filled it perfectly cramful.

Keeping these things dark, they begin to grow downwards properly, and have beautiful long roots before they begin to shoot up.

That is the grand test of successful bulb-growing! If when you take out your dishes in six weeks they are all full of roots, you have every reason to be extremely pleased.

You must not water your dishes while they are in the cellar, or, if you do, it must be *very* little. The glass pans are sure not to require it if you moistened some sand at first as I told you—but the common red flower-pots may, about twice in the second three weeks, stand for a short time in a saucer half full of water. In this way, you see, the roots will suck up some moisture without the bulbs being wet.

If you keep them long in the cellar you may go on watering *in this way* about once in ten days or so.

You may keep your plants thus till the shoots are two inches high ; but you must watch that they do not get damp or mildewy, and if they do you should dust the bulb with dry sulphur and wipe the mould off carefully. If one should chance to decay instead of growing, as sometimes happens, especially among Snowdrops, you should always be careful to throw it away directly.

When the time comes for bringing some plants to the window, of course you will choose those that have got good roots. If they are growing well you are sure to see that it is so—for the little roots twist about and often peep up in odd corners.

When they come out of the cellar they may be put upon the window-sill, and after a day or so you may begin to water regularly. Filling the *saucers* is the best plan for pots, only don't let the water remain there more than half an hour. Milk-pans or soup-plates should be put to stand downright in a pail of water till they are well soaked through—but one such thorough soaking ought to last a week, especially if you cover the sand with a little moss.

While the flowers are growing, however, they *never* must get quite dry—and it is not easy to

give them too much water. *The water must always be given with the chill off.*

A few pieces of charcoal in the water-glasses are very useful, and if ever you take a bulb out of one glass to put it into another, you can add to the water a spoonful of powdered charcoal, which will do the flower a very great deal of good.

When the dishes stand in the window they should be always moved before a frosty night—indeed I always *do* put a few of mine at night upon the chimney-piece—though I am afraid it is not quite the thing.

In replacing them in the window it is better to change them each day, so that one side is next the window one day and the other the next. But this is not important so that the plants do not grow *too long*. When they grow long and weak you may be fully certain that either the room is warmer than they like, or else that the plants are too far from the window. The nearer they stand to the glass the better.

The beautiful little Cyclamen must not be put in the dark at all. It must have a small, well-drained pot filled with leaf-mould, on the top of which you must put the root, pressing it down a little and putting a little soil round it but not *on*

it. You should then put it in a window and give a *very* little water every other day.

The Tulips, Snowdrops, Miniature Hyacinths, and *Scilla Sibirica*, and Crocuses, do beautifully to grow either in sand, or water, or soil. Red Van Thol Tulips and white Crocuses look exceedingly nice together, and the Hyacinths, Scillas, and Snowdrops, mixed together, are perfectly lovely nosegays and last an unheard-of time.

A very good group for a large saucer or soup-plate is made of three Van Thols in the middle—and about a dozen white Crocuses, with three or four more Van Thols here and there amongst them.

A whole plateful of Tulips is delicious too—you cannot tell how sweet it is. And three pink Hyacinths with two or three white ones, about half a dozen Scillas, and a ring of Snowdrops, is charming for a centre dish, or to place in a hanging basket.



KALENDAR OF WORK TO BE DONE IN THE GARDEN.



January.

THIS is not a very good month for gardening.

The ground is often frozen so hard that we cannot dig it, and when it thaws we find that it is wet like clay.

Rather a cold time too for loitering about; if there is any work done it ought to be something active.

If our garden is already laid out nicely we really cannot do much to it. The frost, however, gives us an opportunity of walking about the beds without doing damage, and if we have anything to do in the way of gravelling, or any tree-stumps to arrange, or any old trees to cut down, now is the time that we had better do it.

It is what a friend of mine would call such jolly good fun to grub up some odd old root and get

it dragged to the garden. We had once two enormous oak-trunks, they had been "hollow trees" for I should think fifty years, the whole wood seemed gone and only a sort of shell next the bark was left. How large they were I cannot now remember, but I do not think the largest was less than five feet across. Their trunks were lashed in some way or other on wheels, and a nice piece of work we had getting them set in order. Some friends of ours just then had two much smaller stumps; theirs were mounted on the stems of two cut-down trees which made a sort of pedestal, and theirs had the bark off, but ours had the bark left on, which we thought most natural as they were intended to stand upon the ground. We had the turf taken up for some way all round, and a heap of soil taken out, so as to sink the root a little and make it stand the steadier; when it was in its place the turf was put on all round again. Some of us were very active in the transportation of these great roots, and that, I assure you, was work for a winter's day. The quantity of soil that it takes to fill these tree-trunks is quite prodigious, load after load seems to be swallowed up. In this respect of course the smaller trunks are done a great deal sooner and much more easily,

as they are more like large flower-pots. The trunks require filling very well, and a good deal of care should be taken in all cases to mix plenty of sandstone, and clods, and pieces of turf, or charcoal best of all, amongst the finer soil with which we fill the hollows. This prevents the soil from getting into a great lump from want of sufficient drainage.

The soil itself is best used light and rich. A good deal of leaf-mould answers very well—and cottagers' children often do grand things for their fathers' gardens, by collecting leaves in autumn to be put in a heap to decay. And in the winter months they help to burn soil and bits of stick and refuse—which may be one reason, young ladies and gentlemen, why your own gardens do not look so brimful as theirs sometimes do in the summer. Decayed vegetables are the best things to feed new vegetables. Charcoal also, or carbon, is extremely useful, because it has the quality of sucking out moisture from the air, and thus it supplies the plants, not only with the carbon that they require, but also it brings near them the gases that they want, and more abundant moisture. I have sometimes heard of a crop of weeds being sown and let grow nearly up to blossoming time,

and then being dug in wholesale—that I found was done because they made good manure or food to feed the next crop with—and in the West Indies the plantations of Sugar-canes are sometimes chiefly manured by their own leaves and *ashes*, when the hollow canes have been used for burning. I am sure you wonder what good ashes can do! And the reason will let you into quite a gardening secret. Some plants, you must know, which grow with hollow stems, like Bamboos and Corn, and, as I said, the Sugar-canes, have in their composition more or less of a salt called silica.

Now where a thing must have something in it, it cannot very easily be made without that thing—and so it is that for a crop of Sugar-canes some silica is wanted.

You think it is there in the ground? So, perhaps, it was at first; but one crop has eaten it, and another has eaten it, and at last, if things go on so, it will all be gone. If, however, the crop decays upon the ground, as in a desert island, all the silica goes back again to the ground, like it may do in ashes, and so the crops go on year after year the same. I think you will now perceive that the soil you put your plants in ought to be of a nature likely to suit those plants, and the more

you learn of Vegetable Physiology the more you will learn to grow into clever gardeners.

I have explained all this to you here because it looks so stupid to go blundering on without caring to know the why and the wherefore of the things that are.

To return to our tree stumps.

If then you want to have very luxuriant leafage, and climbers twisting round and covering the sides, you are pretty safe in getting well decayed leaf-mould. It is much the better if it has been thoroughly frozen through and exposed to the air, some time—one wintry work is, therefore, to turn over the heaps, if heaps you have, of soil.

The stumps then should be well filled up with soil. Don't plant things at first. Heap the soil up well, and then when it has sunk, as it is sure to do, fill it up again till it seems to sink no more. For any other stumps, too, that you may have got before there cannot be a better time for putting in new soil. If in the autumn, the plants were taken out—for they were most likely greenhouse plants or annuals—and if the soil was removed, you have only now to find a fine frosty day for getting ready a wheelbarrow or two full of soil and filling them all as usual. Of course the soil you use need not

be frozen. The gardener or you will have heaped it up in some shed, or garden-house, so you will have a fine frosty day to work on, not to cut up the turf or the gravel walks, but the soil all the time will be as nice and light as possible.

If you are making a garden now, you may also be preparing already to fill your beds. You can get all the heaps of stuff that you mean to make them of, put in their places ready, for you must well remember that in March and April every time a wheelbarrow goes along the ground it will do so much damage to your fine turf or gravel.

Some people are so very lucky as to have a shed to themselves. If you have this you are real independent people. You can work away in January as briskly as in July, and such a cure for chilblains and cold fingers never was invented.

Of course in your shed you keep all your garden-tools. Then you have, I dare say, a great heap of soil. There are a good many things you will want in summer—and these I expect must be got now or never.

We had a sand-hole, whence we fished out pieces of sand to carry shed-wards. I remember thinking some oyster-shells also a great find.

If you are trusted rubbish-burning (have you

read "The Stokesley Secret?") you may have a heap of charred stuff. If you are in a woody place you may get some scraps of charcoal. In limestone countries you may get some lumps of lime—only mind the dust does not ever fly into your eyes—and wherever you are, you are sure to find heaps of broken tiles and flower-pots and quantities of nice sticks.

Breaking flower-pots fine is a capital shed employment. If you are real good gardeners, you will be quite aware that, unless you grind them, you cannot make them *too* fine. One good-sized piece of tile, or better than that, an oyster-shell, does to stop up the hole in any flower-pot, and then the finer the bits that fill the next two inches the better it is, and the more completely workmanlike.

Another grand occupation is the sifting the soil for summer. I am afraid I used to be very fond of doing it. It *is* so nice to see the heap of fine soft mould increasing. My way of going to work was to have a large sieve stuck on the corner of a wheelbarrow, (inside the barrow,) and then to throw in large trowelfuls of soil from the rough heap put ready—as the fine soil ran through and made a heap it used to be turned out,

and there it was afterwards all ready for our "potting days," when cuttings and seedlings required all our care.

I once remember coming to such grief. It came to my knowledge, by some cruel taunt, that previous to my exertions the soil had all been sifted quite properly by the gardener. I was not very big then, but after that I think, I sifted no more soil! Little pegs, or hooked sticks, should now be prepared, for pegging down plants in summer. It depends upon circumstances whether this can be done indoors in the evening. When people have a basket, and keep the litter in there, I have an idea that sometimes it may be managed; but when, on the contrary, the school-room floor is all strewn with scraps of stick, which get in the way of every one, if I were Miss —, I think *perhaps* I might object to it!

You should remember now to prepare too your lines and measures. You can mark with ink, or on sticks by notches, many of the most requisite—for instance, one straight stick may be cut a yard long, and you may mark twelve inches, and two feet, and one inch, and two, and four, and six inches. All these little things come in extremely useful later in the year.

Then you have also, if it is not already done, to determine your garden-plan. If you make it on turf, the green piece of paper or silk of the shape it is will make you a good ground, or if you mean to use gravel, you can have dingy blotting-paper.

For trying the colours I have already mentioned wafers ; and when you want to have beds arranged in rows of different colours, you can get the effect beautifully by cutting pieces of coloured paper the size of half-crowns, shillings, sixpences, &c.; putting these together, one upon another, you can try them and change them as often as you like.

For straight borders also you can do the same with strips. I have heard it proposed to work the pattern on canvas, so as to have it at hand to carry out to the garden !

The plan of using different sizes of different-coloured wafers or round patches is really very good. On a gravel ground, for instance, you would have all the largest circles green, because it would be best to edge the beds with green ; and then you could try purple, and then yellow or scarlet, or perhaps you might try a white edge, and then dark blue and crimson. You must,

however, allow for the difference that the green leaves will make when they mix with the flowers.

When the colours and shapes are settled, you have, moreover, to decide upon your flowers, and to be careful as to their height.

A good gardener would keep a list each year of plants that seemed to grow well, and of their height and colour, and their time of flowering. You might sew paper together into a little garden-book, and on one page mark plants that you wish to have again, and on another, set down what you consider failures. Remember always that many tall-growing things will still do for pegging down, and thus make good beds of flowers. Roses even are often done in this way. But almost any plants that flower on side-shoots answer.

One very important thing I had nearly forgotten, but if you should happen not yet to have planted Hyacinths in your garden, and have any places ready for them, you may even in January put in your roots, and they will often flourish.

I planted last year, myself, a good many Hyacinths and Anemones as late as January, and they blossomed quite nicely about April and May. The roots should be put in about four inches

deep, and you had better choose a nice mild day for doing it. Take it all together, I do not think it is at all a bad plan to plant as late as January, but that you must remember is only *out of doors*, all for flowering indoors are got in long ago. For if you planted Hyacinths out of doors in November, and they should be peeping up when a hard frost comes at Christmas, you will have some danger of seeing them sadly nipped, unless a snow blanket comes to them, or unless you are careful in covering them with wisps of straw, or leaves, or fern, or with branches of evergreen stuck into the ground to shelter them, which is the best plan I know.

THE WINDOW GARDEN IN JANUARY.

I must not forget to mention the plants you have in the windows, because in the winter they are nearly your only flowers. If you planted bulbs at the proper time in autumn, you will now have quantities of the loveliest flowers, making the rooms quite sweet. The chief thing that you have to do is to keep them watered, always being careful to use lukewarm water ; for though they may not want watering more than once a week or

so, if they once get dry they will be greatly injured.

You must also be careful to keep them in the lightest place you can till they are in full blossom, and if the leaves get dusty, you should wash them with a paint-brush full of milk-warm water, or with a piece of sponge; you will be quite astonished to see how black the water becomes and how green the plants. This, however, must be done in the morning, and when the sun is not shining brightly on the window. The reason of this is, that when drops of water collect and stand on the leaves, they make a kind of burning glass in hot sunshine, or in frosty weather they freeze the place they stand on.

Myrtles are nice window-plants, and they will also delight in being washed occasionally. They take a good deal of water, and these, like plants in pots, should always be watered with water with the chill off.

Heliotropes and Geraniums and Verbenas, if you have any in your windows, must never be really watered themselves this month. Their pots should be in boxes or in outer pots, and the most you should do if they flag is to keep the sand or moss between the two pots damp.

☞ Musk you may now begin to water, or to sow in pots, if you want it to be green very early; but it is a pity to set it growing if you have not a light place afterwards to keep it in, so if you are pressed for room you can keep its pots almost dry and standing in some dark corner till it is warmer weather.

Arums are likely now to be in blossom, if you are ambitious enough to have some. They should have a good deal of water, and be kept in a nice light place.

Some people might even now sow a few pots of seeds, but if you must have early ones, they are best sown in autumn, and seedlings are things that take up a good deal of room which might be filled with flowers. It all depends, however, on what your ambition is.

If you sow the seeds now, mind that the pots are drained well, and the soil put in firmly nearly to the top of the pot, and only water your pots by putting a little water now and then in the saucer just whenever the pot itself looks dry. The soil sucks up moisture enough in this way, or from the sand or moss in an outer box.

Mignonette, Sweet Peas, Tropæliums, and a few such things are the only seeds you should think of

sowing now, and these only if you like to take the chance of their success.

February.

THIS month we may begin to prepare the garden for all the summer's show. And though the work at present is only digging and getting ready, and perhaps planting some things, we must not think little of it, as all the success of our garden depends on this being well done.

People may fancy that, so that the top "looks nice," underneath does not matter—but that is indeed a blunder. The top may no doubt easily be smoothed over, and then what happens next? Why all the loose top-soil that has been made "nice and fine" gets washed straight down by the first heavy rain, and there you see your plants with their roots all left bare.

You must remember then that it does not answer to have a hard floor below and then on the top perhaps an inch or two of soft soil. You must try and make what farmers call the sub-soil, also light and porous—that means so far

broken that rain and air can get to the roots of plants—and yet so light and without a hard sort of floor that rain can soak away readily when it has wet the earth well through.

To do this you see a fine deep digging is wanted, and though it requires a strong man to dig deeply all at once, you may manage nicely to do all the work yourselves if you are only satisfied to take two or three spadefuls deep. You will find it best I think to fix your line straight along the ground as you may see the gardeners do when trenching—and then if you take out along the whole line a spade's width of soil and wheel it in your wheel-barrow to the place you mean to dig to, you will get one clear line to begin with.

Taking out the soil another, or even another spade deep, and carrying it off in the same way as before, you make preparations for digging deep accordingly. Having got so far you should begin taking up spadefuls of earth and turning them down so evenly into your trench that the third at last, if you go so low, comes to lie the topmost. And when you get to the place whence you took the soil that you first turned out, that soil goes in and makes the bed all level. Of course a clever

young workman will take good care to avoid treading on ground once dug, and will also be on the look out for roots of weeds, or stones that may turn up.

I always was very anxious to have my garden arranged so that I could reach to the middle of beds without treading on them. On a wet day for instance it is not nice to have one's foot go down deep into the mould leaving a great hole. And people are always apt to tread in such wrong places and perhaps to crush down a flower-stem just rising through the soil.

The plants, if any are in, should always be taken out before a grand digging begins—and be laid on one side carefully till the piece is dug. Taking up these said roots requires a little care. Some people go to work as if the only thing was to *get them up*. That is quite a mistake however, for the proper question is how to make them *grow* again.

We must then be careful to take up the roots unhurt, and to take up some soil with them. You should watch the gardener some day making cuts straight down all round the plant, and then taking out a spadeful of soil, and getting his spade nicely below the plant ; you never see him take hold of the stem and give a twist and a pull ! No, he

loosens it all gently, and lifts it at last quite carefully.

If the plant is a large one, he trenches out soil all round it, at some distance off, and then works carefully at loosening the soil under it by slipping his spade downwards. You must think how it is. If you *cut* a square piece of moist earth all round it will lift up in one piece, but if you merely try to take up a spadeful it tumbles all to pieces just as it does in digging.

The next thing is to put on new soil, if wanted ; but this is not likely to happen when you give such a deep digging more than every other year or so ; indeed, if you begin by putting all new soil it will last several years with only the help of a little leaf-soil sometimes, such, for instance, as dead leaves well dug in, by spreading them over the top before you begin to dig, and so burying them all along as you go. When a little new soil just for the top is required, and sometimes beds get low and want something to raise them up a little in the middle, you can have recourse to the heaps you prepared last month. That soil being wheeled down has only to be spread carefully on the beds, the roots of course first being taken out, just as if you were digging.

The best day for wheeling this would be a clear hard frost ; but then, unluckily, that does not do for *spreading* soil on the beds, for if the soil underneath is hard frozen when you cover it up, the frost stays in the ground and chills your plants, and does a great deal of harm.

If then you can find a fine *dry* day when there is no frost you can go to work nicely; or you may take advantage of frosty weather to wheel down your soil, and then leave it heaped till weather comes for spreading it.

Your Rose-trees now will require attention, and here you must mind what you are about. You know those long tall shoots which Rose-trees send up so often ? If these grow too numerous, you get all shoots and no Roses. The thing to do is therefore to cut every other one down nearly to the root, and greatly to shorten all. Don't, you know, be *always* cutting your Roses, but in February generally you may shorten their branches a good deal with advantage. You should take care to cut sloping upwards, and just *above* a bud—I don't mean a flower-bud, but a bud where leaves are about to come, so that you will not have an untidy piece of bare stem sticking up. This is a general rule in all kinds of pruning. You may

now also fork into the ground all the manure or leaves that have been round the stem during winter. I once had a Rose border which was cut rather close in autumn, and all the pieces and leaves were then buried in a coating of leaves and rubbish, and when this was forked in in spring the Roses began to grow, and we had such a show of blossom as I have seldom seen.

Your Crocuses and Snowdrops which are now in blossom may not be disturbed. The beds that they are in should be dug, as I said, in autumn, or if you are so grand as to have a reserve garden with pots of bulbs, and some means or other of getting "bedding plants" to come after, you would perhaps give the digging in May, when you take up the pots of evergreens and spring bulbs, and prepare for planting all your summer flowers.

All the work, however, that I have here described, may be done quite well even as late as March. I have only given the directions this month because very often there are such lovely days in February that we can't help gardening, and I always myself liked so very much those few first days for pleasant garden-work, when everything around began to look so spring-like.

WINDOW GARDENING.

The dishes and pans of bulbs will now many of them be beginning to go out of blossom. While they are in flower you can't give them too much water. You must be careful also when they begin to fade not to let them dry up too quickly—it is best only to cut off the stalks of the fading flowers, carefully avoiding hurting the leaves or breaking them, and if the bulbs were in water, you can then lay them in a heap of soil with the tops just out, and keep them safe from frost. But this is not much use for things that have flowered so early—I think it is better to put them aside and to have new ones next year. If they flower indoors as late as March and April you can plant them afterwards in soil in some out-of-the-way corner, and very likely then they may flower again next spring.

In these pans of bulbs you will no doubt have quantities of blue Scillas. These will not yet be nearly out of blossom—and as they always bear removing perfectly well, you can gently draw them straight up out of the sand they grow in, making that sand first very wet indeed, and plant the

pretty blue flowers in another dish immediately. Sometimes such things look very pretty indeed growing in little crevices on a heap of rock-work which is covered with creeping moss.

You can this month begin to sow a few seeds in pots. But March is the great time for this, and I think you may well content yourselves with making all things ready for the grand sowing then. To fill a set of flower-pots, take first pieces of broken charcoal, then a handful of *moss* for each put upon the charcoal, and then, filling up with soil and pressing it gently down, leave it to wait for sowing-day. The soil should be moist but not really *wet*; of course you know that when it is very wet the proper thing to do is to stir in dry soil with it *before* you use it.

But how do you mean to raise your "tender annuals" and to strike your cuttings? If you do not possess a regular heated Plant Case suitable for the purpose, and if you have not got a little greenhouse-room or a hotbed corner you will have to contrive.

For my part, I think nothing is like contrivance. It is so nice to be able to make the things that we want ourselves, and to see our own plans answering. When I was a child I was always making

plans for tiny greenhouses or hotbeds made of dead leaves ! The latter are very difficult—you must have such wheelbarrowfuls of leaves to be of any use ; but I got on much better with hot water contrivances, and once struck a good many cuttings by means of a stone bottle or two nearly buried in a box of sand, on which I put pots of cuttings. The difficult thing of course is getting hot water to put into these bottles ; and also there is the trouble of taking the pots on and off.

Sometimes cutting and seedling pots do nicely in a window-sill, being put each night to stand upon the chimney-piece.

March.

MARCH is the first of the grand gardening months. All good gardeners now must be extremely active. The bees are humming busily on the patches and beds of the bright spring flowers and the Yellow Crocuses have brown bees hidden in them sucking out the honey or gathering stores of bee-bread. Have you ever seen the bees with their baskets filled, as if they were large

boots stuffed full and heaped with bright little yellow balls? This is the food with which the young are fed, and you may often see a tired worker laden at the hive-door, and another fresh bee coming to unload his friend. Bees are things that make gardens very cheerful. There is a warm, pleasant feeling of a sunshiny day in the very sound of the bees as they hum amidst the flowers. I was always particular in sowing flowers for them, and there sounds something pleasant in "having a fine bee-pasture." Borage and Mignonette are first-rate things for this, and though the former certainly should only be in the bee-ground, as it is hardly pretty enough to have in a flower-garden, I am sure the latter is a flower of which we are never tired. I like to sow it everywhere where there is a corner vacant—amongst shrubs and borders and in beds of flowers, and once I remember well a house-wall covered with Roses and Cape Jessamines which grew up from the gravel, and all along by their roots was a most fragrant carpet where Mignonette had sown itself.

That was growing, you see, actually on gravel, and it is often found that on such hard dry soil the seeds that stand through the winter answer very

well. In spring, however, nice rich soil does best—only, *whatever you sow, you must always firm the soil first*; patting it down with a spade or pressing it with a saucer. If you don't do this your seeds will not grow well.

When we have a garden with a rustic fence, one of our earliest cares, when fine March weather comes, should be to set plants to cover it, and where we have not plants enough, to make up the want by seed-sowing. Most plants will bear moving now if we give them water enough and do not disturb the roots; but still if it is possible to get shrubs moved in September, October, November, or even sometimes December, it will be a great deal safer and they will grow more quickly.

If, however, you have only lately got your garden or have a chance of getting some nice shrub for it, you must be ten times the more careful not to disturb the soil in which it grows, and when you put it in the ground you should pour in a quantity of water and make quite a puddle.

I *have* planted Roses and such things in March—on going to a new house—and even some that had to travel a long way, when they could have no

soil left them, and many of mine certainly did grow and flower. But then, in taking them up, I had a thing full of mud just thin enough to be splashy and yet pasty, and dipped the roots in this, so that when it dried they wore a coat of brown mud which kept the young fibres safe. Of course in replanting a large hole was made and a puddle of mud formed in it by adding water and stirring in the loose soil, and then, this hole being filled with earth, the roots had got around them plenty of food to live on while they took hold.

However, if this planting is done in September so much the better for you. When the planting is done we may begin the seed-sowing, both in the beds and along our fence. What thorough nice work this is! Don't you enjoy seeing the sun make a nice hazelly surface over the bed you have just raked, and does not the earth smell pleasant as you turn it up? Nothing is so delightful, I think, as the spring gardening. And then, in a week or two, all the little seeds coming up—the watering some, and the shading others, and the transplanting others, and earthing up Sweet Peas, and putting sticks to climbers or bringing their tendrils up to climb upon the

fence, all this is delightful. In the spring indeed we have lots to do !

But now I will first describe the sowing seeds for the fence or for the garden hedge. Nothing I think for this can be much prettier than Sweet Peas, and nothing, I am sure, is to be grown more easily. The pots of seeds that have been brought on indoors would no doubt flower early, but those that grow out of doors will not be far behind hand. My way is to make half a dozen holes with a sharp stick in the ground, and to drop a pea into each, and then to fill up the hole with a little dry sand before I put soil over. You know it does not do to leave the seed in a hole that is not full, and the sand I think is more nice than soil to fill it. The holes should be about three inches deep, and be rather near the fence. *Nasturtiums* or *Tropæolums* and *Canariensis* may be sown in the same way. The latter sometimes requires a little heat, but when it grows without any it answers a great deal better, so that it is well worth trying, and it is a flower that comes out very early and grows very quickly. If you have some seeds sown in pots indoors, and can plant them out, *pots and all*, it will be all the better for covering your fence quickly; but if you plant them out before the frosts are

quite gone, in May, you will want some of the shelters or covers you made on the rainy days, and which always come in so handily.

The hardy annuals generally may be sown in patches now, just stirring up the soil, and firming it with a flower-saucer, and then sprinkling the seed thinly, and shading the place over with a flower-pot if the seeds are very small indeed, because in that case you cannot cover them much with soil.

The Stocks too and biennials generally may be planted out now where you wish them to flower, if you have been keeping them in a reserve-bed somewhere.

The Carnations and Pinks too should be carefully planted out, and I assure you you cannot make too much of these sweet and pretty flowers, for I never knew a garden where "Cloves" were not popular.

Pansies too should now be planted out, and they make charming beds, and go on a long time blossoming. But they do not answer well in a very sunny place, though, at the same time, they don't at all like damp; a sloping border, not very sunny, suits them. Anemones and Ranunculuses may still be planted if, as sometimes happens, you have got behindhand. Both these flowers make delightfully

gay patches, and you should always in planting them fill the hole up with sand, and only put an inch or so of soil over it. They should be planted about two inches deep.

April.

WHAT a pleasant month this is always in the garden. We have just now a world of work to do, and it is all so pleasant that we want to do all at once. There are seeds to sow, and cuttings to strike, (the process of doing which will be found in "May,") biennials to plant out and watering to be done. I remember how delightful we always used to think it when it came to be time to water. The flowers and leaves look all so very fresh, and the scent of the watered ground is perhaps the pleasantest of all.

It is indeed really necessary, now that we come to April, to think a little of what we are about. It will not answer to do indoor work on fine days, because the fit has taken us to put in a lot of cuttings, even although it is true we may do it out of doors. There will be many days when the rain

may keep us in, and on those days certainly we had better fill our flower-pots, and do shed or indoor work.

Our first work in April should be sowing seeds and putting out any young hardy plants. The Stocks and Campanulas of all things we should look after, because they are so pretty and so very bright-looking. Hollyhocks, too, if we have a corner where we want a tall, grand flower, ought to be planted now. All these young things do best if planted in the morning of a rather showery day, only if a gleam comes of hot sunshine you must rush to cover them up. The great thing for them is to prevent their flagging, and you should have their places ready for them before they are disturbed, only taking up at a time just what you want to plant that very minute.

A great thing is to make the holes deep enough, and I dare say you have often noticed a good gardener giving a sort of twist of the trowel at the bottom of the hole—working up the soil in a way that you thought most useless. This working, on the contrary, makes the soil nice and light, so that the young tender roots can travel quickly down through it. In planting the seedlings you should be always careful not to bury them at all deeper than they

were before in the ground. It is a great deal easier to draw the earth round them afterwards if they need earthing up, and plants put in too deep are very apt to decay. They require also to be most gently handled, or else a succession of snaps will leave all your nurslings headless—which is deplorable. You will find it best therefore to take your time, and fill in the soil very gently while you hold the plant most carefully in its place with your other hand.

There are not likely in April to be any real hard frosts, but if any morning the leaves should be frosted, you will have to water them directly with cold water. That sounds very strange, but if you do not do it, you will find the leaves turn black, and even your Tulip-beds may be all the better for the same care being taken.

When things face the north this does not so much signify, or when they are shaded; because then the sun does not shine on them till they have time to thaw; otherwise it injures the plants, just on the same principle that people coming in “frozen,” or calling themselves so, must not rush to the fire till they have got warm gradually.

On the whole, I think, the watering time generally, for the next two months, had better be in

the morning, as of course it always is in the winter. The principal annuals that you ought now to sow are Mignonette, *Nemophila Insignis*, which is a lovely blue; Larkspurs, which are dark blue; Nasturtiums, which are all shades of orange, from yellow to dark red-brown, and of which the dwarf kinds are extremely gay and useful; *Eschscholtzia Californica*, which has the advantage of a name which I hope you will spell right on the labels, (for my own part, I candidly confess that I always copy it carefully from a dictionary,) the flower is very pretty—pale yellow with an orange spot—and the leaves are most charming; dwarf, German, and Ten-week Stocks; Snapdragons of all colours; Candytufts, white, pink, and purple; gay and various French Poppies, *very* gay, bright-fringed flowers; *Anagallis*, *Convolvuluses*, *Campulas*, *Lupines*, and *Veronicas*. I think you are quite safe in any of these you sow. They all are really pretty, and grow well.

The *Lobelias*, China Asters, Cockspurs, Prince's Feathers, *Mimulus*, *Petunias*, &c., do best when sown in pots indoors, or in a pit or hotbed. When you are able by any means to give them a little warmth they are well worth growing. I do not mention Balsams, because, though I am

fond of them, they are more suited for indoor growth. Your chief difficulty with these things would be in the watering. I *never* water pots of seedlings overhead at all—the pots are merely put to stand a short time in water.

Cobea Scandens, Ipomea Quomoclit, scarlet, pink, and white—and Ipomea Rubra Cerulea, a beautiful purplish blue, are also things that do well with a little heat.

People who have got a pit may easily have a hotbed. Old leaves partly decayed will give a little heat, or the gardener probably would bring on some seeds in the corner of a real hotbed. The difficulty there is, that if you pay your seedlings too many visits while they are in the hotbed they will perhaps meet with dismissal—for it is not good for the cucumbers to have the glasses always opening! These tenderer seeds, however, may very well wait till May, and the best almost that I ever grew were sown in a spare room window.

May.

STRIKING cuttings is perhaps the chief thing to think of now. A few dead flowers will have to

be cut down and a few bulbs after blossoming may be withdrawn from the garden to ripen somewhere else ; for if roots and leaves are not injured they will do very well in some sandy soil in a corner out of the way, where they may stay quietly till the leaves are dry and the roots are ready to be put away dry in bags.

A few more seeds will still have to be sown, and a great many more plants will want to be planted out. Many of the plants thus planted will be cuttings probably that you struck in March or April, and kept in the window hitherto, and as they go out to the garden others will take their place.

So I will begin at the beginning and try to explain to you how you should strike cuttings at any time in the spring from March till the end of May.

There are, you must know, two very different sorts of cuttings. There are the green "soft-wooded cuttings," which grow extremely quickly, and the harder and woodier kind, like a piece of Myrtle or a stem of Fuchsia, which will sometimes be long before they shoot out at all.

The cuttings to plant in May (or that may have been planted for the last two months the same way) are Verbenas, Petunias, Heliotropes, Salvias,

Begonias, Fuchsias, Geraniums, and other things of this kind. All these things depend chiefly on not flagging for their success—they should be taken off at a joint, that is, where you see a sort of little knot like a new shoot springing, and the lower leaves being carefully nipped off with scissors, the cuttings should be planted closely in pans of sand and water, or in flower-pots filled with firm moist mould.

It is a great thing always if you can keep them shaded and rather close for a day or two. I have struck such quantities in boxes covered either with a pane of glass or a sheet of oiled paper, but the moment that they will bear having air and light you must begin to give it, for I have often known the most promising plants just damp and die for want of it in a very short time indeed.

Cuttings like these bear having air at night, if they are safe from frost, better than they do by day. When you water them you must be very careful, and I think you will find it safest only to wet the soil and *not* to sprinkle the leaves till they begin to have plenty of air, when it is quite delightful to water them well with a rose on the watering-pot. You must, however, be careful always to use warm water.

The Begonias, Verbenas, Petunias, Salvias, Mimulus, and Calceolarias I think answer best in saucers or soup-plates of sand with water poured upon it till you *see* the water above the sand. You can then stick in the tiny cuttings as closely as you like—about an inch apart—and if you have a greenhouse, or a warm window, or a warm light place to put them in they will grow very fast indeed. I have heard of people putting plants over hot-air pipes or flues, only the benefit of this is lost if they are not in light places. A flue in a greenhouse does splendidly for such things to stand on, with a little sand underneath the pots if the flue gives much heat. By when the water is dried up the little plants will have struck root beautifully, and you must make the sand quite wet again before you attempt transplanting them. When you do this you take up each little bunchy plant, and hold it in a hole in a small pot of soil while you fill the hole up with dry white sand all round it, watering it and shading it. The cuttings that you grow in pots of soil are generally those of a stouter sort—as, for instance, the scarlet Tom Thumb Geranium. These may be shaded a little the first few days, and they will also require to be watered.

The best way of planting them is to put a small pot of sand in the middle of one that is filled with mould, and then, making little holes with a short round stick just outside the little pot, you put the end of the cutting in, and press the mould firmly to it. You must then take care to keep the sand-pot wet, and that will water your cuttings quite enough. When these are transplanted, you gently push your finger or a piece of stick against the hole underneath the flower-pot and so make the ball of soil slide neatly and gently out. You afterwards very carefully separate the young plants and put them in their own pots.

These young plants, struck either in March or April, will make charming things for the summer garden. They require light, however, till they are put out, and it is sometimes difficult to know what to do with them if we begin very early.

However, if you have a pit or box with a glazed or paper "light," you may feel quite happy—for after March they do quite well in such a place—and you have only to be careful in covering them well at night.

The hard-wooded plants generally grow, as I said, slowly. These do also very much best in sand, only the sand need not be made very wet,

and they may require to have a bell-glass or tumbler over them at first. Rose cuttings, and Myrtles, and Sweet Verbenas, are grown in this way beautifully all the summer through, and the common pink China Rose if you strike it now will most likely give you charming flowers in autumn.

Later in the year most cuttings will strike well out of doors, especially if you shade them by a paper or glass "handlight;" four sides of a box does quite well for this with a piece of oiled calico nailed over the top. The hard-wooded things, like Fuchsias, planted in firm poor soil will often keep alive all the winter and shoot out well in spring.

Pansies, Pinks, Wallflowers, some Campanulas, and Sweet Williams will grow very well if planted out of doors in a shady border, and you would find a mere piece of netting or calico useful to shade them for the first day or two—just to keep away the hot sun or a drying wind. These will root very quickly, and when planted out with care they will most likely blossom soon and very well.

Heartsease especially does better a great deal when grown from cuttings instead of being raised from seed.

June.

JUNE and July and August are not very busy months—our chief work is now to keep our gardens tidy and to admire the flowers that now are coming out.

It is a great thing now, too, to notice exact colours and plants that look well together, and to try and remember which seem to thrive well in the different places. Any one fond of gardening finds some interest everywhere. One cannot pass a mere window full of plants or a cottage garden without observing something about our favourite flowers.

In June we may still be putting out any plants, but I think it is rather pleasant to be for a while complete, and for the three summer months to make as few changes as we can.

We have too now the delight of gathering flowers, and there is always something to be done in training all the climbers and cutting off dead blossoms before they go to seed.

Weeds are also generally apt to give some work, though when we are on the watch to pounce on the first that comes they gradually lessen as they do not sow seed.

A little three-pronged fork is the most useful tool in this month, because with it you can so nicely loosen the upper soil just round the root of a plant, or draw out a weed from some corner in a bed.

Watering, too, is a daily delight in June, and can hardly be too complete, a thorough washing does the plants so much good.

Tying up all the plants that require support is another process, in which our winter's supply of sticks will be extremely useful, and pegging down Verbenas, and Roses, and Petunias on the ground will give us work in abundance though there is not much to say about it. The long straggling branches that would look wild and ugly are thus all made neat and quite to form a thick mat upon the ground, and at the joints where the plants touch the soil they generally put out roots, and become in this way ever so many plants. Pinks and Carnations are often thus increased this month, slits being made half-way through, just at a joint, and then a little soil put over it and a small hooked stick to keep the branch bent down. You should always choose however a sunny day for this work, because when the sun is shining the Pinks are flabby, and after rain they break very easily.

In June we shall have some of the nicer kinds of cuttings struck in May that will perhaps be ready to pot out for window-plants in winter. Fuchsias, sweet-scented Geraniums, and Myrtles are my own especial favourites, and Heliotropes also are pleasant things to grow. You should be careful to put these plants in the smallest sized pots that they seem to thrive in. I think four-inch pots are large enough for almost any young window-plants, and so at first a still smaller size may do. You should always be very careful in the drainage you use for window-plants—a few little bits of broken pot with moss over them does very well, and then amongst the soil you can put a little charcoal. Half-charred turf and soil from just beneath it, is excellent for such plants.

July.

JULY is really June-work over again. But for this month I will describe to you the art of budding Roses, and if you are as delighted when your first bud takes as I can remember being when I found a long shoot from mine, I can only say that it is trouble well spent both to describe the process

and to work it out. I think budding Roses is an especially charming work. You must do it neatly and it requires care, but only fancy how very nice it is to have whole hosts of Roses of the prettiest kinds, or perhaps to be able even to bud the loveliest flowers on the wild hedge-trees! Where people have some special little glen or favourite dell of wild flowers they often like doing this, though I must own myself that I like the wild flowers best, and had far rather see them growing in all their own wild luxuriance. However, all these things are matters of private taste—and some beautiful garden Roses must look beautiful anywhere—I would only venture to observe that the rampant, free-growing kinds, like Muga and the Ayrshire and the Boursault Roses, would have the best chance of prospering.

The delight of budding is that we thus multiply Roses so. It would be nice to try how many new sorts, new sorts for us I mean, we could collect ourselves. Roses, I dare say you have noticed, seem sometimes to be peculiar to a place. I remember at this moment at least four different kinds which I never could meet with except in one place each, and two out of the four were most truly exquisite. One was a small red Rose of a climbing kind; it was

killed the winter before last, and it was such a pity I had not got a bud! and a mere Rose from a flower vase may give us the material from which to grow a new plant.

The budding is very easy when once you know how to do it. Your only implements need be a sharp penknife and a little worsted, or a little stiff clay, (called grafting clay,) or even a strand of bast which has been well steeped in water; you also may find a small ivory paper-knife come in extremely useful.

Having decided exactly the tree you wish to bud, the next thing to do is to prepare the bud.

You see a little plump pinkish bud not yet beginning to open out into leaves, itself growing generally just above a large leaf. Taking your penknife, you must cut out this bud most carefully—just scooping it out, as it were, with a piece of bark about an inch long attached to it. A little bit of wood will come off with the bud, and this must be taken out without hurting the bark, which generally will separate from it easily. If it does *not* do so, you will find the bud quite useless.

So far, then, for the bud. On the tree you find a suitable place for a bud on a nice healthy shoot, and here you draw the point of your penknife just

across the bark and then straight down some way, exactly as you would do supposing you wished to cut through your own glove without hurting your hand—you see that this must require no small caution. The slit being made both ways, you gently raise the bark from the wood with the ivory knife, and lifting up the flaps you quickly put in the bud—fitting its bark tightly round the stem of the shoot you are budding on, and wrapping the bark belonging to the latter over the bark connected with the new bud. Two people sometimes do budding well together, one making the slit and the other preparing the bud, for the great thing is to have it quickly done. You afterwards plaster a little clay on the slit, or wind some bast two or three times round and tie it some way below.

Some people bud five or six different Roses on a single tree—I cannot say, however, that I much like the fashion.

You should always choose a cloudy day and a shady time for budding, but if you want to practise you can do so well with a willow shoot or a hazel branch indoors, raising the bark and putting in a bud carefully. You will see in a week or two if your Rose buds grow ; if they do not do so they will fade directly.

August.

IN August we must begin to think of the coming winter.

At this time of year all kinds of plants grow easily, and it is a very good plan to strike a great many now and to keep them growing in winter while the old plants take their chance. Scarlet and other Geraniums, Fuchsias, Verbenas, &c., all grow most easily just put in the ground out of doors.

The chief inconvenience to me seems keeping them in winter if they are potted separately, and for this reason I think the best plan is to furnish a large flower-pot, or even a box, several inches up with drainage—to fill it afterwards firmly to the brim with poor sandy soil, and then to plant it full of cuttings, each sort in a pot together.

These pots do beautifully sunk in a bed of coal ashes or gravel, and they may be watered every now and then—their flagging at first, however, is not of the least importance.

It is not likely that they will grow very actively, and if they will just keep alive till the spring comes round, as they do most easily if merely secured from hard frost, you will begin the next spring triumphantly with a goodly stock

of young plants all well rooted long ago and prepared to make a grand start the instant you pot them off into nice little pots of light rich soil to grow.

The cuttings strike very well put into a border anywhere. And almost any piece of stem that has a joint in it is fit to make a cutting of, and will speedily put out roots at the joint that is in the soil. I have known a bundle of old Fuchsia stems cut into lengths for flower-sticks and left by accident lying in a heap of soil and leaves—and, lo and behold, when spring came the sticks were growing !

Now too is the latest time for cuttings or pipings of Pinks and Carnations. These are often put in in June, but August in some respects is perhaps more secure, unless we have been able to make up a slight hotbed, which the Carnations would like very much.

The fresh healthy young shoots make the nicest plants, cut off at the third joint—which is perhaps three inches long. The securest way of planting them is perhaps in pots in a hotbed, the pots having a layer of sand at the top of the mould, and that sand being wet. I have had some dozen pots thus filled in July or August without perhaps the loss of more than a single cutting. They soon

begin to grow, and bear both air and water. It is quite a mistake, I think, to cut off the ends of the leaves. It looks very ugly and does not a bit of good. It is a good plan to plant a few pipings in small pots singly, because these will often make such nice plants for windows, and the Carnations are charming for blossoming at all seasons. If, however, you have not got a hotbed, the next best thing to do is to get a small bed ready of rich soil deeply dug, and then to mix with it a fair quantity of sand and to pour water on it till it beats up into quite a puddle. The cuttings then (peeling off the lowest leaves) are stuck into this mud, and the hand-glass, or bell-glass, or paper-covered frame being put on at once, they are not again uncovered for a good many days—when they generally are found growing, and are then by degrees accustomed to the air.

The cuttings that were potted early may often by this time require larger pots to blossom in in the winter, and any Geraniums that blossomed in the summer and were cut down afterwards will now have begun to shoot, and will be greatly benefited by potting in small pots and in the poorest soil, a day or two after which they had better be put to stand for a while in the sun to “harden,”

—the browner and barkier the wood now becomes the better they will stand either cold or damp in winter—and early in the spring you can give them larger pots and nice soil to grow in, when they will very shortly blossom.

September.

It will now be shortly time for our plants to be taken up if we have got any that we do not intend to leave out.

The cuttings, too, and young plants that you have prepared for window gardens will all want now to be potted and soon to be taken in.

The Chrysanthemums, if you have any, will be ready soon to take their place in the beds, and they are very gay though they are autumn flowers, and we cannot care for them quite as we do for spring and summer blossoms.

A good many seeds of annuals may be sown this month, in an out-of-the-way corner with a north aspect if possible—and on a bed of poor soil beaten very hard. The seeds do well in this way, and often blossom very early next season, when of course they are taken up, a spadeful at a time, and

carried to the garden. *Nemophila*, especially, does beautifully in this way.

Cuttings of China Roses should be planted still if we have any notion of a Rose hedge next year—for let it be remembered that a hedge takes numerous plants. The pretty little crimson China Roses are often full of blossom, and by checking their flowering and breaking off the buds in August and September we may get a display of flowers in the later months when Roses are very precious. I think, indeed, they are very well worth sheltering in the cold autumn nights and from the frosts of early spring by a few yards of worsted netting just hung loosely over them. Making this netting is another occupation for the lengthening evenings—and you will be quite astonished to find how completely a slight thing like a net will preserve the trees from frost. In autumn, by such means we can keep flowers very long, and in spring the same management will give us early flowers.

September is certainly a very dull month for gardening. There is plenty to do—but it is all undoing—carrying away the rubbish as one after another our flowers lose their beauty and by degrees become mere wretched heaps of haulm.

The work of planting the earliest spring bulbs must not, however, on any account be forgotten. The Crocuses and Snowdrops, in fact, do best all the year in the ground, and so do the Narcissi, and the Daffodils, and the Lilies. I don't expect that any of these flowers get taken up each year and put in again in the fields, and yet I am sure they thrive extremely there. In cases like these it is always best to keep as nearly as we can to what we see is natural.

This principle it is partly which makes the science of Horticulture grow so very rapidly—people watch continually all over the world new habits of special plants; and as we learn what are their natural habits we are taught very plainly how we may grow them best.

It is, however, generally a good thing to take up bulbs sometimes, because some new bulbs come at the side, and some below, and others above the old ones, and then it is awkward to have the patches of Crocuses walking about the garden, changing their places every year a little.

This month, I ought to observe, is a good time to make edgings. You fasten a line quite tightly straight along and then cut, as it were, a tiny ditch all along beside it—working from the line.

Thus, in going down your spade cuts a steep straight side—and as you throw the spade out slightly the earth is pushed up a little. You divide the edging plants, whether Box, or Thrift, or Thyme, or even Gentianella, into little tufts, and press each tuft firmly against the straight cut side,—and as you go on you fill the trench up neatly. The Gentianella does best, however, filled up with light rich mould similar to peat earth. And if you make use of Thyme it likes very sandy soil. Thyme, however, I warn you, is not a proper edging plant—only its scent is delightful and you may well be fond of its beautiful little flowers and of its small pink leaves. You may, too, sometimes be able to collect the plants for yourselves from some lovely Thyme down, from which you delight in bringing it. And hardy Heathers, too, are such delightful border plants—and some of the creeping Saxifrages are also extremely pretty.

If by any chance your garden should indeed have a stone edging or a tile of any sort, I advise you strongly to let this plant creep on it, as it looks very pretty thus and takes away quite the ugliness of a stiff stone edging.

October.

IN October, alas, when the best is said, people are only waiting till the frost kills their flowers. And yet how very pretty our autumn gardens are, and how sweet the scent of the few still lingering flowers.

Our chief work this month, if we have a Greenhouse, is putting our plants into it—if we have a spare room, or even a dry corner in a shed or tool-house, safe from damp and frost, quantities of plants or roots may even be stowed there—and the cellar too will often take in a few.

I have sometimes had Scarlet Geraniums keep beautifully all through the winter either in a cellar or in a dry dark cupboard, like those in old-fashioned houses where wood is sometimes stowed away for burning—or they have been laid in heaps of sand in a corner of a tool-house or in a room over some stables where they are safe from frost. I remember particularly a sort of lumber room in our garden, which, though entered from the garden, was really over a cowhouse on the other side, and there whole heaps of roots used to be kept safe each winter.

The great thing is to let the roots dry gradually

so as to dry outside without baking through. The soil may be moist if any sticks about them, but any drops of water or leaves with wet hanging to them must be avoided carefully, and indeed the leaves are better lopped off altogether. The roots of Scarlet Geraniums keep then like potatoes or Dahlias—but in the spring they do best in a little warmth, just to start them growing.

When you take up the plants you should choose a nice warm day. Cut the tops of the plants quite off, and shake away the loose soil ; then if you put the plants together in a wheelbarrow the sun will very quickly dry the tops a little where you cut them down, as the sap might otherwise cause them to decay. Some people dust a little lime and soot over them—but I don't see much good in it, and both soot and lime are tiresome things to handle. Soot is objected to when our clothes get black, and lime is awkward if it blows into our eyes, which very often happens if we do not take care.

Geraniums will do even hung up by a string to a nail—so that really there ought to be no difficulty in preserving them. Still, unless I had a place where I could keep the plants safe in pots, I am sure I should prefer only taking cuttings and keeping them indoors. Where people cannot do

this, of course it is a great thing to be able to keep old roots.

Fuchsias do capitally cut down in the beds and covered with heaps of coal-ashes. They may also be taken up and kept over the winter in sand. They don't bear drying like the Geraniums do because they are not succulent sort of plants—that is to say, they have not got a supply of sap to live on stowed away inside.

The grand thing in October, I think, is building the Turf-pit. It is as good as a house in a desert island. It may not be young-lady-like, but I have helped to build a great many, and it is such pleasant work on a bright autumn day to pile up the turfs together and see nice thick walls grow. My weak point was always the thatching. I cannot at all pretend to say how that is done. But still I know it is done with fern, or ling, or heather, or straw, or rushes, which are laid on a kind of frame and fastened down in some way, and this is a sort of thing that can be learnt very easily.

The frames of course are only made to lift on and off; and before I begin to speak of the actual building, perhaps I had better describe the lighter frames which may be used in spring to cover

tender plants, as well as in winter to give light to the pit plants.

These frames are made of four stout pieces of wood, nailed and fastened firmly at the corners—they ought to be thick enough to allow of being morticed or dovetailed in.

This frame should be the depth of the pit from back to front, and half or a third or a fourth of its length, according as you mean to have two, three, or four lights—if, that is to say, you mean to have more than one. Let the lights be large enough to cover the walls as well as the pit itself.

Having made the outer frame, you can nail a few spars on, lengthways does best, with perhaps one across to strengthen them in the middle. Three most likely will do to support the linen that is to cover it; if you want more strength some pack-thread lines may cross it any number of times.

The linen then has to be nailed tightly on—some coarse common linen or calico—being painted over on both sides with boiled linseed oil and whitening. Paper also answers the same purpose, being painted over merely with the boiled linseed oil, which is bought ready boiled at the oilman's.

These sort of lights are said to keep in more heat than even glass does, but of course they

ought to be covered in hard frosts or snow ; and you should always put them away carefully when they are not in use.

The Turf-pit itself has to be built in this way—and first of all things I warn you that though it is called a pit it is not to be built in a hole. You must, on the contrary, look out for a nice dry bit of ground for it, where the water does not stand, or you will have all your plants damp off.

You first measure out the size the pit is to be. If you want a large one you had better make it longer—not adding to the width much, as you ought to be able to reach to the middle of it from the top and bottom—you will find it awkward if you forget this fact, because you will not be able to get at your centre plants.

Having marked your ground, four thick stakes must be driven stoutly into the ground to make the corners—and I should advise you to let them stand a little higher than the walls are to be, because then they help in keeping the roof in place.

Some of the building-party ought to cut turf and carry it in nice thick pieces, like bricks, about three inches thick and at least six or seven square, and these pieces then should be piled on one another till the top wall is at least two feet high,

and the front one, maybe, some three inches lower. The thicker you make your wall of turf the better. It ought to be quite two turfs thick to keep out the frost. Sometimes, too, you may heap up soil and leaves outside in a bank, which greatly adds to the warmth.

I have heard of some boys making a stout sort of boarded or brick wall, using simply for it anything they could get, and driving in posts all along for security—and then making a double wall, they filled in the whole space between with a bank of loose earth and leaves. This is a very easy and effectual plan when people can get old boards. The roof should always rather overhang the sides ; because if the walls get damp it is a poor look-out for the plants inside, which soon get damp and mildewy.

I have seen these pits too done with wattling or rough basket-work, with the holes, when there were any, stuffed up with moss, and the sides painted over to preserve them better—roof, cover, and double walls, all were done in this way ; and I certainly think it made the neatest-looking pit that could be.

The floor of the pit should be very dry, and a good thick layer of coal-ashes and small cinders is the best thing to put in it for the pots to stand in.

You will never in winter, of course, water the plants in the pit. If any should want water you must take them out to have it and afterwards replace them ; because if the stuff in the pits gets wet, what would happen to you if frosty weather came and you could let in no air ? I fear your plants would soon assume a deplorable look !

The pit should always be prepared in good time. It is a great thing indeed to have the plants unhurt by frost to start with, and if the pit is not ready they may be nipped unexpectedly before you can get them in. The more room they have, and the more air, till frost really comes, the better—and you should always pull off dead leaves and take them quite away, and never be so slovenly as to leave them about the pit.

November.

LITTLE as there is of pleasant work just now, we still may make work pleasant by looking on to next year.

A pretty garden people would have in spring if they never worked at anything that did not at once look gay !

Our most immediate work perhaps is clearing away dead rubbish. Then we have beds to dig, and perhaps bulbs to plant—very often still there are shrubs or trees to move; beds of Roses may be covered with manure, or leaves with a little soil scattered over to prevent their blowing loosely all about the garden in the winter storms; and lastly, now is the time to work if we are ambitious of having a hedge of Roses to bound our domain next spring.

The rustic fences all covered with Sweet Peas are indeed very pretty and their flowers smell very sweet in the summer time, but different things suit perhaps different places, and I have known some people who prefer a Rose hedge to a flower fence.

One of my own gardens had a Rose hedge round it. The garden itself was on turf, and we had the turf taken up all round the edge, and first a heap of large pieces of stone and brick was laid along exactly where we wished that the hedge should be, and then this heap being banked up with earth, and beaten down with spades into a proper slope some two or three feet high, a double row of Rose-trees was planted all along, not evenly, but zig-zag, so as to come one in one line between every two in the other, and the rows being put in, the turf was

laid up the slope, and looked very soon as if it had been there always.

I had Lilies of the Valley and Violets planted all along underneath the Roses, for there was a narrow piece of earth not covered by the turf, as Roses, like other plants, do not do so well when anything grows up round them so very closely as turf does.

Thus it is that for hedges, as well as for standard trees or for climbers planted to cover rustic trellises and arbours, it is always desirable to leave a little space before the grass closes in. Many flowers, such as Violets, or Mignonette, or some of the pretty Saxifrages, do not however grow close like grass, and matted, though they still are green enough to hide an ugly patch where the bare earth shows. *Anagallis* does well to sow round standard trees, but *Forget-me-not* is perhaps still prettier in a hedge and rather more in keeping. Sweet Woodruffe, too, grows delightfully under walls, and smells deliciously, like beds of new-mown hay.

The shrubs generally will move now very well. Roses of course, and Ribes, and Lilacs, and Syringas, and Honeysuckles, and Almond-trees, and *Laurustinus* and Box—people manage most years, I think, to be moving something. Then Lord

Mayor's Day in London is said to be *the* day for planting bulbs!

I feel exceedingly doubtful myself how far this is always best, because mine have once or twice done better when planted quite six weeks later. However, I can here describe the doing it. You ought to make the soil all ready by digging deep, and if there are many worms and slugs in your garden, I should much advise you to mix a little soot in the soil all about the roots. Then you should put in a little white sand, and set the bulb upon it about four inches deep; cover the bulb with sand, and fill up the hole with soil. Some people put a little heap of broken turf or dead leaves on the top to protect the bulb from rain, but this does not look very pretty in a garden. Tulips are done in exactly the same way, and they do best, I think, planted at this time.

Unless you have sometimes seen a real fine bed of Tulips I am sure you would never believe how exceedingly pretty they are. I think a bed of the crimson *Rex Rubrorum*, or of *Imperator Rubrorum*, is really splendid, and as these things are not very hard to grow, I cannot see myself why you should not have a show bed of Tulips that would be quite first-rate.

Many people, after planting a bed of Tulips in deep, light, sandy soil, mixed, as I said, with soot, put over the top a sort of light shelter of leaves. I do not quite recommend this because if the leaves get wet they keep wet. Cocoa-nut fibre refuse answers however admirably for purposes of this kind, as it dries very quickly, and it would not either look untidy, as leaves do, while it is itself a very good "leaf-mould." The single Tulips are generally much the prettiest.

Beds, each of them all the same colour look particularly well ; when the colours are mixed they do not make such a blaze—but you can have one bed crimson, and another purple, and another scarlet, and another primrose ; and then there are besides pink and lilac, and crimson and white mixed. Indeed, without Tulips, I do not know what we should do. A small bed all filled with Van Thols would look very pretty edged with some small white flower, and green. White Alyssum makes thus a very pretty border, and you should not forget the edging when you plant the bulbs, as now is the time to plant such things as these.

One year a friend of mine had a very pretty ring of Snowdrops round a bed, edged with some

little creeping green thing, and the Snowdrops in their turn edged the mass of Crocuses that filled up the middle, and looked quite perfection, all being purple and white.

Some such ring as this surrounding a bed of Tulips would look very well indeed, and for a bed of pale white and rose Van Thols, what could be lovelier than an edging of Gentianella?

December.

I FEAR this month there is nothing great to be done out of doors. Here and there a broken branch may want to be cut quite off, that it may not drag about and injure other sprays; and if it snows, perhaps the evergreens will want shaking, as the snow might otherwise heap up on their leaves, and break them. The snow, however, is the gardener's friend. We ought never to think of scraping it away, to see how our flowers fare under it; it is the very thing to keep them safe and well even for weeks together.

When that long, hard frost came the winter before last, I heard of a pit full of plants remaining quite unhurt. It was a mere common turf-pit, or

thick wall of turf and soil and stakes built up into a square, covered with thick thatched hurdles, and filled with plants and cuttings. Verbenas, Calceolarias, Pinks, Carnations, and Roses, will thus often live all the winter safely, though in fine, dry weather they should have as much air as possible that they may not get damp, &c.; damp kills a great many more plants than cold does.

At one of the greatest gardens near London for Calceolarias, the young plants are kept all the winter in beds of sawdust under common hotbed frames, which may be replaced very well by glazed calico "lights." But I think when one can get a table in some spare room, the best plan for keeping these things on a small scale is having the table placed near the window, and giving no more water than will keep them just alive, especially in this month, which is so long before the spring.

If, however, you do happen to try turf-pits out of doors, (directions for making which I gave you in October,) your grand care now must be to give them air on dry mild days, and to take off dead leaves, and then when it snows you may rest contented, and believe that the snow is making a warm wrap for them.

The bulbs that are coming up should have some

leaves or straw laid round them, or have pieces of furze, or gorze, or laurel stuck into the ground to shelter them, and the tender plants, like Fuchsias, or Salvias, or any tender Roses, should also have some "mulching" put round the stem and covered up with soil to prevent its blowing off.

The bulbs, and evergreens, and shrubs may still be planted, if it is not frosty, and if it was not done last month. The plants you have in the pit, or anywhere, to keep, must be kept very dry. You cannot give too much air when it is fine and not frosty, and you can't be too careful in shutting up tight when there is fog or rain.

The chief garden work, however, has now to be done indoors—preparing things to use in brighter and warmer weather, and looking after the flowers we have in the window garden.

WINDOW GARDENING.

Just in December our window garden grows gay. The pretty little red Tulips, and the Scillas, and the Narcissi, all are now peeping out. The Hyacinths, indeed, will scarcely be much out yet, but even they are showing a little colour where the flower will be—and Snowdrops and Crocuses are often in full bloom.

I don't think any flowers give so much pleasure as those that we grow at this time—every single blossom is watched for so eagerly, and all the flowers we have are generally so pretty.

The pots of Primroses now will be in blossom; the exquisite little Cyclamens, too, are in full bloom—our windows certainly may be very gay.

All these winter flowers require much the same kind of treatment. You must well remember that though the time is winter the plants are in a warm room—and so your first care each morning must be to water each with water with the chill off. Let the water just run through the pot and then be sure to empty the saucer soon. The bulbs that are grown, however, in pans or glasses of sand or water, if they are in full blossom, may now be kept quite wet. The water may go partly up the bulb, or damp moss may cover it if it is in sand. They should all be kept as near the light as possible, only after they are in blossom the sunshine makes them fade quicker, so you had better then shade them from it.

You may now begin to bring on a fresh supply to replace those bulbs in flower—that is, put one set that have made fine roots to be near the light, and plant another set, or moisten the sand they

stand in, if you have been so prudent as to keep them in dry sand hitherto.

Some of the taller flowers may require a slight support lest they should bend down. The miniature Hyacinths, Tulips, and Scillas never do this however. When a support is wanted, I think the best thing is a stiffish piece of wire, which you keep straight at first and then bend out suddenly into a sort of shoulder, after which it goes straight down again for five or six inches more. The shoulder is to pass over the bulb—for you may not poke wires through it. And then you can tie the stem of the flower gently, to the upright part of the wire. If, however, you plant a large bowl or milkpan full of bulbs, one single stick placed in the centre will do to fix all the stems to—for you can have threads of silk or lines of wire to connect them with it. Be very careful too not to draw the string tight, as the stems snap easily. However, even supposing you had such a disaster, the broken flower would still come out in water.

Your cuttings indoors now only want air and light and to be kept from damp. If you have any Evergreens you may sponge their leaves, and give them abundant water—and indeed even the bulbs and Cyclamens will like a good washing sometimes,

so that you do it when they are not in full sunshine, and so that you are sure that the frost cannot come in to them. I never leave my own winter flowers in the window at night. I put them always safe inside the shutters, but do not bring them too near the fire.

If you want more work to do this month you will find plenty no doubt amongst the indoor gardening business that I have already mentioned—and I think you will quite agree with me, by the time that December comes, that a garden finds us business for most days in the year.

BIRDS AND FLOWERS;

OR, THE

Children's Guide to Gardening and Bird-Keeping.

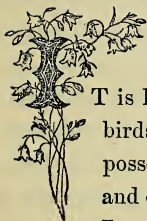
PART II.

B I R D S.

BIRDS AND FLOWERS.

PART II.—BIRDS.

CHAPTER I.



INTRODUCTORY.

It is hard to say, in the country, whether birds or flowers are the pleasantest to possess. Some, I suppose, like birds best, and others prefer flowers; and as for me, I generally managed to have both.

There is a wide difference though between keeping birds in cages, and having a gay garden. If we neglect the garden, the worst thing that happens is a large crop of weeds and general desolation; but if we neglect live creatures, the torture that we inflict on them is such that I am sure we should be quite wretched ever to think of causing it. Fancy a poor little pet bird, who is

used to listen for your voice each morning, and to hop about quite delighted when it sees you coming, taking seeds out of your fingers, and scolding you even, as my "Fidd" does me, if you are too slow ! and some day, you go in, and it is all stiff in its cage ; and then to your horror you see that the water-glass is quite dry, or that the seed-tin is empty, and the poor little pet is starved. I have heard of birds being starved too with plenty of food in sight—some one perhaps goes rushing to feed a bird, and they are in a great hurry and don't fit the tins in properly ; and I have known my own birds get quite hoarse and ill in a few hours from such a thing. Mine did not suffer much, because I soon heard them call—but think if I had been out ! You see it will not do to begin to have pet birds unless you feel quite sure of taking proper care of them. We have no right to make things wretched for our amusement ; and unless we feel quite secure, we must not run the risk of it.

One person should always be answerable for the feeding. And there should be always a fixed time for doing it. It is a very good plan, for instance, if the bird is kept in a different place at night and in the day, to feed and clean it always when you

change its quarters in the morning ; for in this way you are less likely to forget to do it, or if you do, most likely you soon will miss your pet from its usual place.

We had better begin, however, by thinking of how to obtain our birds. When people first start a new interest, they are sometimes apt to think that they cannot have too much of it, and thus they begin on too large a scale, and then find it very vexing to part with birds, of whom they have grown fond, because they find it really impossible to keep all. I have tried having quantities ! Once I had several dozen, and it took at least one person's time all day to attend to them, and in all the number I did not half know any so well as I might have done had they been much fewer. If I were you, therefore, I would begin with only one or two birds, or at the most with a pair and one other ; a single Goldfinch or Bullfinch or Tomtit is immense amusement when you can let it hop about in the room, and if you have a pair of Goldfinches or Canaries you may feel quite sure of their being very happy in each other's company.

It is very funny to see the queer tempers birds display. I had, some time ago, a Mr. and Mrs. Bullfinch, and nothing would induce them to live

in the same cage, they really quarrelled frightfully, and yet if we ever carried one out of the room leaving the other behind, there was such a noise and crying, you would think the birds broken-hearted ! They chose to live in two cages at each end of a chimney-piece, across which they conversed.

Then sometimes you find a crusty bird, who won't live with any one ! This is the case with a Goldfinch of mine. He keeps his own cage to himself, and drives all intruders out of it, and if we let him loose with a flight of other birds in the room, he flies back at once to his own cage and drives away all others. A very bold little fellow indeed is Master Fidd, for when his cage stood on the window-sill a short time ago, my big grey cock came outside and crowed, and looked very hard at the seed and biscuit, and Master Fidd forthwith went up to his highest perch, and opened his wings, and shook them, and scolded poor Mr. Dorking in a most reckless manner. But those birds which "show character," and have funny ways of their own, are, I think, invariably those which are brought up tame. I have a perfect horror of catching wild birds, and any one who considers it will, I am sure, agree with me. I have myself, in

London, very often bought these poor unhappy birds—letting them out in town is a doubtful kindness—and I have tried my utmost to make them at least less wretched by large cages and quiet treatment, even thus, it is lamentable to think how many die. But I bought two Robins once, late one evening, to let them out next morning. When the morning came, however, they both lay dead in the cage, with their beautiful wild eyes open, as if to the very last they had been watching and full of fear.

Even tame Robins, indeed, are amazingly timid birds in spite of their bold ways. I was speaking one day to some tradesman with a Robin by me, and glancing towards poor Bobby, I found him “all of a heap,” shivering and shaking as if in an ague fit. Of course, I picked up my bird and comforted him directly, but I had always to keep him carefully from the near approach of strangers. Wild Robins, however, will not live in confinement, and it is wrong and cruel ever to think of buying them. Larks are nearly as bad. And Thrushes and Blackbirds, caught after they have once flown, quite as bad. They seldom sing and generally die. They sit silently in the cage, and do not seem very wild; people then suppose that they are real tame birds, and buy them, paying,

perhaps, seven or eight shillings for one ; in a few days, however, the poor bird dies miserably, serving its purchaser right ! We should not like ourselves to be caught and put in close prisons, and carried away from home, and shut up from the bright sunshine and from the green pleasant fields, and away from the trees and flowers amongst which we used to play ; and how should we suppose that the poor little birds would like it ? It puts one out of all patience to think of people acting so cruelly and so thoughtlessly.

But you will say that I want you to have no birds ! Well, that would be hard ; only, if you remember, I said that the rearing young nestlings would give you a far better and more amusing stock.

My Fidd, who is, for naughtiness, quite a model bird, came into my possession as an ugly little Grey-pate ; that is, a Goldfinch in its first dingy dress. He knows no greater happiness than to scold his neighbours and paddle in his water-tub, and watch my movements anxiously when he sees the hemp-seed box or a tempting biscuit—and, as to real home-reared birds, you may do pretty much as you like with them. They get so audacious that nothing does scare them much !

Canaries again, and Java Sparrows or Rice-birds, and those pretty funny pets, "Cut-throats" or "Indian Sparrows," are accustomed to warmth and comfort that they would not find wild in England. We must therefore, of course, be hospitable to these little foreigners, and supply them with their millet and canary-seed, and with the warmth and shelter that they require here.

However, my best plan will be to say something separately on the treatment of each set of the birds that are kept easily and that are really worth our keeping.



CHAPTER II.

DOVES.

DOVES are some of the nicest pets to keep, especially in the country, where there is plenty of room, and air. They live very happily in large square wicker cages, and if they are carried indoors at night and taken out again early in the

morning, they will sit and plume themselves in the sunshine busily, cooing away all the time, and seeming very comfortable. Doves, if kindly treated, become exceedingly tame; I think they were quite the first pets that I ever had, and they were amazing favourites. They are nice quiet birds, very easily managed. Their food should be barley, or grain of some kind, with hemp-seed or linseed. They like a good deal of change, and they are very fond of bread, either dry or soaked.

Their great delight is bathing in a large shallow pan of water, or in a little fountain, and when they are so tame as to fly about on a lawn this is by far the pleasantest way of giving them their baths—for they make no small splashing.

You should always give your Doves a great deal of nice fine dry gravel, and my Doves were exceedingly fond of a little bay-salt mixed up with old mortar or gravel, as it is for pigeons. A little bay-salt now and then can at any rate do no harm, and it is a great thing generally for keeping animals in good health. When you give them this, they very seldom have bad throats, which is one of the few diseases that Doves often have, especially if their water is not kept very clean and fresh.

Doves came originally, you must remember,

from the hot parts of Asia and Africa ; they will not therefore stand cold at all well. In Germany the people keep them constantly in the cottages, and even in England sometimes a pet Dove flies in and out of the house, and lives in its cage or not, much as it feels disposed. This does best in summer, when windows and doors are open ; in the autumn perhaps, the conservatory, the poultry-house, or the offices, become the Dove's best abode.

Some people I knew had a set of Doves, who used to run about and go in and out as they liked. They were exceedingly tame, and did not attempt to fly away.

One of these Doves was called "Tottum," and was not at all Dove-like in its innocence. I am sorry to say that "Tottum" was addicted to stealing sugar ; he used to make such a hole in the sugar basin, that I suppose he thought detection was very imminent, and then he used to scrape the sugar all round into the hole with his foot, to look as if "no one had touched it." And then, besides this, Tottum was unlucky in other ways, and if by accident he had knocked down anything, he would instantly fly quite away and sit perfectly still, high up somewhere, appearing quite unconscious that anything had happened.

I fear that the instinct of concealing mischief is very strong in some animals. I have a cat, whom we always expect has been naughty if she looks exceedingly good. She was found one day sitting on the hearth-rug, with her feet tucked under her, and her tail twirled round them, looking the picture of meekness ; but behind her, at the other side of the hearth-rug, lay a large piece of meat, which Mrs. Puss had just stolen when she heard steps approaching, and of which she now knew nothing.

To return to the Doves, however ; there happened to be a dairy visible from the windows of Tottum's residence, and one day Tottum was absent from home for some time, which caused great uneasiness. His mistress, however, at last spied out the truant amongst the feathered creatures who flocked around the farm, and going at once in quest of him, the moment Tottum spied her, he flew down directly and went home quite happily.

Perhaps Tottum was anxious about being home to dinner—for his character for punctuality in that respect stood high, and as two o'clock struck he was apt to step on to the table.

A pair of Doves generally bring up one or two

young at a time, never more than two, but more often only one, and the little Dove is a real darling when it hops first upon the perch, and sits there, looking like a bundle of fluffy feathers.

The old Dove sits for about fifteen or sixteen days—the eggs are very pretty and quite milk-white; but they don't build much of a nest. A little shallow wicker basket which will wash out easily, tied to the cage in one corner, does best for them to sit in—it should not be hung too high—and the Doves will most likely content themselves perfectly with a few straws or bents of stiff dry grass, laid crosswise, for a nest, which certainly does not make a luxurious bed for the nestlings.

These birds, like most others, have a great dislike to their eggs being interfered with. They feed their young from food out of their own crop; millet-seed is particularly good for them, and corn, and you must take great care that, especially with young nestlings, the food and water is given very often fresh and that the cage is kept very clean. The earlier in the morning that the Doves can go out in summer the better it is for them. In a sheltered veranda, indeed, I have often known them left out all night in nice fine summer weather.

CHAPTER III.

FOREIGN BIRDS.

JAVA Sparrows, Indian Sparrows or Cut-throats, and Wax-bills or Avadavats, require very similar treatment; so we will class them all together.

The Java Sparrows are good-sized birds, as big as a Bullfinch; they are a sort of pale slate colour, and black, with white cheeks, pink beaks, a rim of red round their eyes, and exceedingly pink feet. They have a very sweet short song, but I do not think they are so taking as many birds. They eat millet-seed and canary, drink a good deal of water, and keep each other's plumage in very neat order by a constant pruning.

Avadavats or Wax-bills are charming little pets, much smaller than a Goldfinch; they have bright red beaks, brown feathers spotted and tipped with red, pretty white spots down their wings, and little fan-like tails, which they keep spreading out suddenly and closing again as quickly. They are very active and constantly changing places with each other on the perch, where they are fond of sitting all in a row and singing. They are ter-

rible birds for washing—in fact they like to be bathing almost hourly. And when one is so polite as to provide an elegant bath for their accommodation, meaning it as a hint that birds should not wash in drinking glasses, they ignore the motive and only bathe the more. The song they sing is very sweet though shrill; it is not very unlike a Robin's, and though extremely short is repeated very often, the whole row of small birds singing sometimes in turn.

I don't think they are very affectionate birds to their owner, though amongst each other they are. I have known a little couple seem very dismal when one was sent away to complete another set, and that one was so sad too, that its mistress kindly sent it back home again, when the meeting seemed to afford extreme delight to both parties.

These birds require a good deal of warmth. Their cages should be always covered up at night with green baize, some people even give them wadded curtains. It is a very good plan to surround the cage with glass on two or three sides, or all round, both to keep the seed and water from splashing out, and to shelter the birds a little from draughts, which are very bad for them.

They ought besides, if possible, to be prevented

bathing in cold weather to such great excess, unless they are kept in a very warm room always. But if we adopt such measures as water tins wired over, and little holes to drink through, the naughty wilful birdies squeeze sometimes in through the wires and are found of course unable to get out again. The wires also of the cages for these birds should be very fine.

The Indian Cut-throats or Sparrows really are nice pets. They puff out their feathers when spoken to, making them look something not unlike grains of sago, and doubling their own bulk, which is, by nature, about that of a Goldfinch; and they chatter incessantly, prune one another's feathers, and make themselves in general quite members of the family—chattering vociferously when they hear familiar sounds.

One day, I remember, Puss was left in the room by accident with a pretty pair that I had, and when I sent in haste to see how affairs stood with them, Puss was seated before the cage absorbed in contemplation, while the Sparrows were singing her one of their little songs.

These birds are very pretty. The cock has a bright red collar round his throat. They eat the same as the other birds mentioned with them, with

the addition of chickweed and plain cracknels, of which they are very fond.

These birds cost about half a guinea a pair; neither these nor the others here named being at all more expensive than a good Canary. The Java Sparrows and Avadavats are from eight to fourteen shillings a pair. They should, if possible, be bought in summer or autumn.



CHAPTER IV.

OUR NATIVE SONG BIRDS.

It is, after all, in this class that we find the most universal favourites among birds. The gay little sidling Goldfinch, the sharp uppish Chaffinch, the fat and melancholy Bullfinch, the homely sweet-voiced Linnet, even the big Greenfinches and the perky Sparrows claim to be reckoned under this same head. How very nice it is in spring, in a country place, to find a little bird's nest when we don't mean to take it! We can go

each day and peep into it gently ; and though in the country it may often happen to us to find stray birds to bring up, I would always rather see whole troops of little songsters flying about the lawns, and the winter's snow all trodden with the marks of their little feet, instead of having them taken to bring up indoors. It used to be, to us, always a grand delight when a deep snow came, and when the window-sills, and the parapet near our nursery, bore many marks in the morning of little winged pensioners who were awaiting crumbs. So sure as a snow came, so sure the birds arrived. There were some great Larch-trees just before the windows, and in these we could see "our birds" hopping up and down. And then, what joy if the snow lasted long, and the small birds got very tame. I am sure you all will know how soon one gets to distinguish remarkable birds, and to pity some poor Tomtit, and to scold at some great greedy impudent Robin Redbreast ! A few days' frost is enough to introduce a great many characters to our full acquaintance ; and when three months after we find all the pretty nests, we can't help wondering often if this belongs to that Robin, and if that is the habitation of some particular Linnet, with whom we are on "feeding terms." One of

the very prettiest of all the little nests is that of the Hedge-sparrow, which you often find in a Box-tree, or even in a hedge. The little pale blue eggs are very pretty.

Then there is the Robin's nest in some remarkable hole, or perhaps in an ivy-wall, like that wherein Flapsy lived. The eggs here are pinkish ; and so sure as you peep in, so sure a brown bird hops up to a tree next door—frequently an Elder-tree—and sits there surveying you, her tail being much cocked up, and her eyes looking big and sharp. As you move off, if friendly, you see Mrs. Rob hop home, when she pokes her eggs all about, and seems to be ascertaining that you have done no mischief.

The Thrushes and the Blackbirds as well as the green Linnets are generally disposed to build in large-leaved trees, like Laurels, or else in thick, bushy shrubs. These birds build very early, at least in places where Laurels abound much, and for this reason perhaps they choose them, as the other trees are not yet in leaf. The Blackbird's nest is a large rough sort of business though lined pretty well with hair. The Thrush's is most shapely for people or birds who like mud. Then there is Tomtit. He is not much of a singer,

but he is a real nice bird ; and of all birds, Master Tommy is one of the most familiar and most droll. I had a Tomtit last winter, who made himself a great pet, and one day, alas ! Master Tom had vanished utterly. From top to bottom of the house was ransacked, curtains were shaken, and fenders were looked under. And where, if you please, was Master Tom ensconced ? Snugly in the seed-box, on a bed of hemp-seeds ! He had entered at one of the holes that other birds' heads go in at ! Tommy's nest, however, is well worth a visit. He makes a soft, warm lining of moss and hair in some hole, and there, on a bed of feathers, Mrs. Tom lays numerous eggs. I think I have seen as many as seventeen. Little round pinkish dots, they are not much bigger than peas, and if you peep in rashly, Mrs. Tom hisses at you, or puffs out her feathers boldly, and flies at you in the same way as my Fidd does at Mr. Dorking.

The Goldfinches' nests are generally high up in some old Apple-tree,—pretty neat little structures, such as you might expect; and the Chaffinches, too, construct a most beautiful clever nest, so closely made to resemble the branch it rests on, that the chances are you think it is merely a bulky branch overgrown with lichen. And Chaffie is perched

the while upon a tree hard by, saying Fink, Fink, quite happily !

The Bullfinch's nest accords with its own slightly clumsy habits. The nest is rough-looking outside, but inside it certainly is made very nice and soft.

These birds build sometimes in a thick hedge, often in a thorn-bush, and sometimes I think in Holly-trees. The Bullfinch generally perches on a branch near the nest and sings to his mate while she is sitting. These are perhaps the most affectionate of any of our wild birds—it is quite a common thing for a Bullfinch to die of grief if taken away from either its mate or people to whom it has attached itself—and a pet Bullfinch turned out of its usual sitting-room will cry all day most bitterly, and often refuse to eat. They are indeed extraordinarily sociable in their tastes, and they quite deserve to be made much of accordingly.

When we are going to bring up any of these birds from the nest, whether as picked up or rescued in the country from some impending danger, or whether bought in towns, we must proceed to manage them pretty much the same way. A quill with a notch cut in it is the readiest thing to feed with, and stale bread dipped in water

and squeezed is a very fair food for most, especially if you also give a little hard egg chopped up, and a little milk poured on the bread. The food must be always quite fresh. The birds should be fed at least every two hours from daybreak to sunset. And they ought to be kept very warm and snug, though they must have air. As the nestlings grow they will begin to eat bruised hemp-seeds, and other seeds, which may be strewn about on the floor of the cage at first.

If, however, the old birds are to rear a young one or two for you, you should put the little nestlings in a warm nest in a cage, fastening the door open and hanging the cage near the nest, or if that was destroyed by any accident, near the place where it was.

You must close the door of course before the little birds are strong enough to fly. The cage must be of some dark colour and it ought to have nothing shining at all about it. The old birds will then often go quite happily in and out, feeding their own children; and if you also make occasional visits, as I dare say you will do, carrying food also, the little birds in the cage will soon be very tame. They will learn a great many clever tricks, and what is more, will seem to enjoy learn-

ing ; and as for singing, if you have one good song bird, or if you can whistle well, the little things will soon learn a tune quite nicely.

When you mean to teach birds a tune, however, you should try to prevent their hearing any other air, or other birds singing near them, as that would very likely make them sing incorrectly.

You should whistle to them very slowly and distinctly, and it is a good plan to give the lessons early in the morning, and before and after you feed them. Sometimes, too, they will sing brilliantly for green stuff, and then you should be careful always to give them some when they have performed well.

In taming birds it is a great secret never to startle them—you should go up to them gently, not in a hat or bonnet, and always talk to them a great deal when you are feeding them. They will get so impudent then that they will shake their wings and scold violently if you don't feed them fast enough, or if you presume to serve their neighbours first. An inconsiderate practice, as every one must take turns.

After they are about six weeks old you should begin to give your birds other food besides hemp-seed, in greater quantity, and indeed by degrees

they ought to be taught almost to do without hemp, which is much too fattening and not good for the plumage. In winter, however, they may have rather more. Bullfinches and Goldfinches are those whom it least agrees with.

The best fun of all is to have two Goldfinches kept loose in a room. I have several times done this to my immense amusement. Once I had a tall Fir-tree brought in in a flower-pot, and the two little birds were for ever perching on it close to me, in the window. They would fight amazingly too, and then the victor, perched on the topmost twig, and looking like a brown knob, would pour out a frantic song ; and then they had two picture-nails on which they would always roost, and as they preferred the same nail, we used to have sad doings, and sometimes dared not have lights brought till they were settled in, so that it became the custom in twilight every evening for the door to open cautiously, and an inquiry to be made, "if Goldie and Spinkie had gone to their nails for good?" For washing, these mischievous imps took to a small aquarium, and on the top of its rock-work they used to sit and splash. I am sure I hope the fish liked it.

And then they used to fly at me and seize great spoils of biscuit, and retire to cheffoniers to

fight over it most awfully. One Goldfinch is fun enough, but two, I assure you, are really inexhaustible in the tricks they manage; they are, I think, the cleverest birds of any. The Bullfinch is as affectionate, and the Canaries are much the most quiet, while they too are naughty enough in a more methodical way.

When you can have birds loose in a room a good deal, it is the very pleasantest plan possible to adopt. If you always put the food in the open cages you will find little difficulty in catching them when you like. For if they see you go to the cage, they will think of hemp-seeds, and probably fly directly to see if you have left them any. Canary-seed, rape, a little hemp, and a great deal of green stuff, such as chickweed and water-cresses, should be the food of all these birds. Dandelion and thistle-heads, plaitain or rats' tails, groundsel and lettuce-leaves also are much approved. And Reading cracknels are the very best biscuits for them. Then they can have some strawberries and cherries, and a piece of ripe apple, of which they are very fond. You should not give them sugar or sweet cakes and so on often. These English birds do not build much in cages. Canaries are the best when you want to have young broods.

CHAPTER V.

CANARIES AND NESTLINGS.

WHO does not like a bright yellow-dressed Canary, with its joyous song and its determined manner of making itself attended to? And where we want to have nests, nothing is like Canaries. I have known them build five or six times one year, and the little nestlings quite overrun the cage.

The winter or early spring is the best time to set up Canaries—from November onwards they may be bought very well. It is a difficult business, however, to choose a real good bird; you hear six or eight singing against each other, and the real fact is, you get too much deafened to know very well which is which. For singing birds I think that the little Germans are a great deal the sweetest, but they are very small, and some people call them stumpy. Be that how it may, they are by far the cleverest, and I think the most amusing. These are not however so good as hardier kinds, if you want your birds to build well. A pair of Norwich Canaries would then be your best. And you had better be careful not to have two crested

birds, even if you are anxious to have crested chicks. The more choice you are as to breed, however, the more tender your birds will be; indeed, the first-rate prize birds are generally reared in very small numbers only, and very great care is required for them. It does very well to have a bright yellow hen-bird, they make generally excellent mothers. And it is a great thing to have your birds some time before the building season, that they may get well acquainted with you and with each other.

You ought always, for instance, to feed the birds yourself if you mean to wait upon them while they are building and sitting. If not, let the person who is to do so take care of them from the first, because thus they will be used to the voice and face beforehand. These things seem small but they are important, and while people sometimes are away at school others must tend their pets.

If you have for your Canaries a good sized all-wired cage, one or two little trees will be a supreme delight to them. I have had a large cage with quite a fine grove at the back of Firs and Box in flower-pots, and also these trees have been placed so as to form a thick wood in the centre. The birds are then for ever hopping about the

branches, looking so very pretty and seeming so very happy.

If you want, however, to have your shrubs nice and bright-looking, your best way will be to have two sets of them, and to change about every few days; the set not in use should then get a good washing, and thus they will keep clean. If you leave them in very long at a time they will not come clean again; and if you are short of trees, you can use pretty boughs of evergreens or Pine, planted firmly in flower-pots, when the birds will not know the difference. A pot of Tulips afflicted with green fly, or a dish of Crocuses going out of flower is a wonderful catch in winter; and in summer, you can often bring in a sod of turf, with perhaps some chickweed or groundsel planted in it, or a pot full of young lettuces, which will rapidly be devoured.

I am sure you will find the open sort of cage a great deal the most amusing. If you like to hang it up against some wall, that wall is itself a screen to the birds on one side; and if they stand in the window the glass forms again a shelter, though they get all the light. Still, perhaps the nicest plan is to have a long slide of glass—you can edge it yourselves with stout paper gummed on firmly,

if you can't afford a slight frame—and let it slide like a box-lid along either side of the cage ; you will understand perfectly how easy it will be, with a few wire hooks for rests, to keep the glass in its place. The same glass should do on either side, and it need not cost more than three-pence or four-pence each foot.

One whole end of the cage should open as a door, or else the centre of the cage itself may do so. It is quite easy to have these doors arranged at first, but altering afterwards makes a sad mess of cages. The fewer little doors you have, too, the better ; they don't look pretty, and are very tiresome when clever birds unhook them.

You can feed your Canaries the same as other birds, with canary, and hemp, and rape. Clean their cage well daily, washing the perches now and then with a little soap and water, and letting them dry slowly before you put them back. You ought, by rights, to have two sets of deal perches.

If you had a long cage with three partitions of wire sliding in from top to bottom, you might quite well have three sets of birds. But you must not try to have, otherwise, more than one pair at a time to build in the same cage. For that you must wait till you are an experienced bird-keeper,

and *then* the chances are you won't do so well as now, while you are contented to go on a small scale, naturally, and to be real friends with such birds as you have. It makes so great a difference if you understand birds' tastes! They are as particular as people, and quite as capricious. One likes one sort of cage, another likes another, and a third likes the shade, while a fourth prefers plenty of light; and then they seem to take most unreasonable likes and dislikes in the Canary party—as violent and determined as unreasonable things are generally!

The Canaries will sing charmingly all the winter, the cock-birds I mean, for the others do not sing, though they twitter a good deal, and make you think they are trying; they will also call to you loudly, and hold quite long conversations.

I had this summer a cage full of Canaries, who lived in a spare room, and the door was open often that we might hear them singing; Pussy used on these occasions to creep silently upstairs, but the moment she arrived the Canaries used to call loudly with the shrill long note they always use when they want something, and the little geese used to be found sitting along the cage-front talking to Puss quite affably, but Puss knew better than to do more than look at them. I must here give you one

great caution. If you have a cat trained not to touch Canaries, yellow or jonquille, you must remember well the difference plumage makes. Puss is very likely accustomed to feast on Sparrows,—and Goldfinches, and Linnets, and even brown Canaries she holds in no respect. Most people would say at once cats must not be where birds are. But I do not agree to this, because it seems to me that mice are still worse enemies, and in my own case, at least, I was forced to start a good mouser.

From the very first bright day even in the winter, you should try to give your pets the benefit of all sunshine. As early as February the Canaries will begin to pick up stray feathers, and perhaps, if they fly about, they will proceed to select a lock or two of your hair, as well as purloining threads, or tufts of wool that they can spy out. These are signs of nest-building, and if you mean to risk an early brood, you had better put in the cage a sort of small wicker basket, hanging it rather low, or else providing a shelf to catch birds if they fall; because when young nestlings are active and want to see the world, they are not unapt to topple out of the nest. The old birds, however, much prefer high nests, so if you can contrive a sufficient ledge, that is best. You may now give

the birds a little old mortar mixed with their sand, (oyster-shells baked in the fire will do,) and let them also have a little moss or poppy-seed. Most people give them also hard boiled egg chopped fine, shell and all.

The building requisites are moss, and hair, and wool, and if you watch your birds you will soon know what stuff and colour they prefer, which you must then supply them with, hanging it in a small bag against the wires, outside the cage. If you let the bag be inside the cage it is very possible that the birds may tug it up to the place where they wish to build—possibly into the seed-tin, and there, jumping on it, will try to scoop out a hole! It is a very pretty sight to see the little things building. The hen will get into the nest and twist herself round and round, moulding it with her breast, and tucking in her head, arranging every fibre, and her mate will bring up large bundles of materials, and stand as if admiring while she disposes of them.

The nest is built very quickly ; I have known an industrious pair do the whole work in a day, and then very often the hen is so pleased that she goes and sleeps in it. In a few days generally the first egg is laid—a little pale green-blue one—and some birds begin to sit at once, others wait two or

three days, till they have laid three or four. The latter plan certainly is best for the little chicks, but there is more chance in these cases of the bird deserting the nest, and filling it up with wool, instead of beginning to sit. A few little green branches, such as spruce-fir for instance, are sometimes pretty and useful for shading the nest from view, and the little head peeping through looks prettier than ever, if, as we may conclude, you are permitted to look in when you like. Mind you make sure, however, that your birds are really tame.

Some of mine used to seem quite to enjoy being visited, and would sit and nibble biscuit out of my hand, on their nest. The Canary sits thirteen or fourteen days, and then little hideous wretches are heard to squeak underneath her, and her feathers look rumply because of the small things fidgiting. You also observe both parents standing beside the nest, peeping in with great interest at something you can't quite see, and if you move nearer *to* see, Mrs. Hen wriggles on and frustrates your intention. After a time, however, you espy some wretched animals looking all red and blue, and if your view is at meal time, they seem to be chiefly mouths.

Feathers come, however, before very long, and

within a fortnight, the little birds hop up on the edge of the nest occasionally, and scutter back as if frightened when they see their mamma approaching. They also accustom themselves to poking their heads through her feathers as she sits upon the nest, giving her the odd appearance of a little bird with heads everywhere. The strongest of the party is also sometimes observed on her back. In fact, the Canary nursery is not a little obstreperous.

After a little while the young birds make a plunge to the perch, but they still return occasionally to sleep in their old nest, and the longer it is before their mother begins a new one the better it is for them. The old nest materials should be entirely removed when done with.

The little birds had better be put into a smaller cage, or into at least a separate compartment, being always placed in such a way that they can see the old birds and be fed by them through the wires. These home-hatched little creatures will be as tame as possible if you treat them kindly. And I advise you always to give all your birds names; it makes them so much more interesting, as thus you come to remember the good and bad deeds of each.

I do not think Canaries are very often ill if you keep them clean, and give them air and light, keeping them out of draughts.

If, however, they do happen to "have fits," especially while building, it is best to put the bird gently into a warm-water bath, keeping its head out, and holding the bird in your hand. Then have ready a piece of warm soft flannel, and put in the sick bird as much as possible as if it were in a nest.

Perhaps it will lie on one side and seem very ill indeed ; but warmth is the best remedy, and it is very likely that it will soon recover. A sick bird in winter should generally be thus treated. In summer, however, you must consider if heat is the cause, and if so, sprinkle the bird, and drop cold water on its head, putting it in a very cool airy place, perhaps on a marble slab.

After any injury, quiet is the grand thing, and a cage without more than one perch, and that one placed very low, is the best thing to use. The seed and water should be put close together to be got at most easily, and there should be also plenty of green food given.

Sometimes a bird gets its feet clogged with sand and dirt. You should hold it then very

gently in a saucer of warm water for five minutes, or nearly that, and then set down the patient on a small heap of oatmeal. Two or three days of this treatment will result in a cure, and if your pets are tame, they will eat hemp-seeds while in the bath, and not seem at all frightened. Their feet often get like this when the birds have been long without bathing. A little bath that you can hook on every morning and take away again later is likely, however, to be a grand pleasure, both to the birds and you, and you can build up your bath into any fancy pattern with pretty shells and stones.

You should be extremely careful to use no cement with white lead in it, and also no paint or putty where the birds can at all get at it. Brass wire also should always be avoided. Stained and varnished deal, or plain polished maple is the very best wood to use.

Any cage out of use should be thoroughly scoured out with yellow soap and water, and should be hung up somewhere in a dry airy place, to freshen for its next inmates.

Canaries, I must add, can be taught to whistle tunes, by often whistling to them slowly and very distinctly ; they learn, like all birds, much easiest if taught very young.

CHAPTER VI.

TALKING BIRDS.

CERTAINLY in the country Starlings may well be popular ; they really are so elegant, and they are such knowing birds. They do not do very well to keep indoors ; but either loose about a place, or in a spacious wicker cage, they learn to whistle and chatter almost as well as Parrots.

Jackdaws too are very droll fellows. I have not myself possessed these "talking birds," but I have had the pleasure of being intimately acquainted with several individuals ; and where one is not ambitious of keeping the smaller song-birds, I do not wonder at the interest taken in these rogues. Those that I have known used generally to walk about on lawns, with an open cage at hand to which they could go for food ; but they get a good deal too by roguery, for they are shocking thieves. They also pick up a good deal in the way of insects upon a lawn, which makes them nearly independent, while at large, of other supplies. They are apt to lead the cats and dogs about a place sad lives ; but they are affectionate birds, especially the Jack-

daws, and attach themselves very closely to their special owners.

They generally can be trained to go home contentedly to their own cage to roost, and they do not often wander far from home.

Their great delight, next to mischief or thievery, is in bathing. A large pan, like a dog's basin, should always be provided for them, and there they will make a sputtering. Starlings build frequently in chimneys, and hollow trees, and under the roofs of houses and in old church steeples. Jackdaws do much the same, and they also frequent high rocks.

Many a scrape have young gentlemen got into after their nests. In one edition of Beckstein there is about the worst instance I know of such harum-scarumness. There is at Dundee an old tower whose battlements rise about one hundred and fifty feet from the pavement at its foot; and when Murray, "the Dundee barber," was a boy, a pair of Jackdaws built in a hole in this said tower.

Determined to have the nest, what should young Murray do, but he crept out through the parapet, and a friend holding one side of a Scotch bonnet, he hung by the other, while with his disengaged hand he placed the eggs and young ones safely in the cap! While thus engaged he kept carefully

warning his companion, saying, "If you let go the bonnet, I'll give you none of the spoil." A threat that one would have thought was very little called for.

Parrots, of course, come first among talking birds. Jackdaws speak as distinctly, but have not nearly so much to say : and the Parrots manage too to be so connected in their talk. One Parrot, some time ago, used to be very naughty. She had learnt to swear very badly on the voyage home, and in the morning, on first entering the room, such conversations as this would pass between one of her friends and Poll. "Good morning," Poll would say.

"Good morning, Polly."

"Kiss me, kiss me, give me a kiss," and Poll would open her beak and make a great to-do.

"Kiss me, kiss me ;" and then if you did not kiss her, Poll would get abusive, and tell you to go away, swearing at you quite shockingly, ruffling up her feathers, and stamping her foot in a rage.

If, however, you kissed Poll, she would put out her forehead meekly, and then highly gratified, would say, "Pretty Polly, God save the Queen," and display all her learning.

Polly, however, was a shocking glutton. She used to become quite ill by intemperance in bread and milk, and yet she would sit on the table and declare she was hungry, and say, "Poor Polly, give poor Polly some."

A very good food for Parrots is bread dipped into cold water, pressed dry, and mixed perhaps with a little milk. Fruit of all kinds they are very fond of, especially nuts and almonds. The less meat they have the better for their health and plumage, but they should have always a most abundant supply of water, both to drink and bathe in.

Talking birds, as a rule, are generally rather large, and perhaps more curious than delightful; but cases are known of even Finches, brought up by people, learning to repeat two or three words intelligibly. I think myself, however, that it is chiefly a sort of likeness caught to the time and tone in which the actual words are pronounced.



CHAPTER VII.

GENERAL RULES FOR BIRD-TREATMENT.

THE Canaries and Finch-tribe generally, require little food besides good canary-seed and a little rape or hemp. Green food is always very good for them too, and some people put a rusty nail in the water-glass now and then to strengthen them.

A small bit of Spanish liquorice, or a little brown sugar or treacle is good for them if they are hoarse, or if they look rough and moping.

A thread of saffron may also be given when the birds are moulting, which you know by seeing the feathers falling about. All these remedies should be given in the water in the drinking-glass.

A grand thing with all birds is keeping them out of draughts. If you put a cage in a window-sill and leave doors and windows open, you may expect with confidence to have a sick bird next day. And there is, too, another injury, often quite overlooked, caused by leaving cages standing in such a place, which is, that it may often happen that you are out of the room when the sun comes upon the window, and many people would wonder

how little heat birds can bear. I have this summer often had my birds in the window by me when the evening sun came on it; and when it has not been strong enough for me to have the blinds down, I have known a Canary look as if it was going to faint. It was quite ill and powerless, and had to have air and cold water instantly.

When people come in therefore from afternoon walks sometimes, and find "that poor bird in a fit again," I think that they had better consider how the sun has been.

The sunshine birds do rejoice in, is that of the early morning. When living wild we see that later in the day, generally, they retire to shady trees, and only re-appear to sun themselves before bedtime, in the cold months of autumn.

The morning sunshine, however, is the very best thing for all birds. They plume themselves in it, and bathe, and sing and are very happy. The little nest-birds even get on far the faster when they can have the benefit of its warmth. Darkness, too, of all things is the worst, both for birds and animals.

If there is a nice cheerful eastern window, what can be much pleasanter than to establish a bird-cage there? What are called "cottage

cages," are very nice indeed. But there is a cage of which I think great things, which is long and narrow, being twice as long as it is wide and high; and this cage is all of wire, with the exception of a high skirting board to keep in the seed and litter.

I have had a common cage of this sort made for ten shillings. This had a slide, no drawer, ladder perch low down, and long high perches over, going all along. A cage like this, however, ought properly to have drawers, and then if made in two pieces and exactly similar, each being loose fitting, they can be changed alternately, so as not to leave the ledge open, as people like my Tomtit will walk out if you do.

The best food and water vessels are little boxes with glass sloping roofs, and a drawer inside that contains the seed or water; a series of little holes let the birds' heads in. Even garden saucers, however, need not be despised as seed or water-holders, or as baths as well. One of our best managed bird-cages was provided with these alone. They are so easily cleaned, and can be cleaned so thoroughly.

A bird-cage like this I am mentioning, might, if you liked, have divisions to slide in. And here

again I must caution you to have the wires kept sufficiently close together. The slide of course will go in between those of the common width, and you must remember that it is very likely the cage will mostly be used without the slides. Master Tommy and some small Redpoles gave me abundant instruction as to all the holes birds can find. We used to find so often that they were perched outside their house. Another "naughty-bird-hole" is the place intended by cage-makers for hanging on the seed-tins. Of all things I advise you, to forbid these holes in any cage you order; they make many cages absolutely useless for small birds—they are so very fond, if they can, of squeezing through them, and even if it be only into the seed-glass, it is very doubtful if the bird can turn round to get out again. Many accidents, too, have happened from drowning in the water-glasses.

If you must have seed and water-things to form part of the cage itself, I think that drawers or tours are the best things to use. Some people, too, have tiny cages made in a separate piece, which they fit on the place where a door unhooks, and which contain food and water, and are glazed all round. It is not a bad plan often to have a pane of glass to form one side of a cage.

We have to remember, moreover, a goodly supply of red sand or fine gravel.

When it is plentiful, it is a most excellent thing to spread it quite thickly on the floor of the cage. The little birds scrape and dust in it, and enjoy it mightily. There is a tall glass with a spout sometimes used in cages, for containing water. Whatever the arrangement is, however, it is best to preclude bathing in the drinking vessel. A little bath can then be put in on purpose, or better far, a glazed cage be hung on the door, containing one. It is amazing fun to see the washing that then takes place; and perfectly shocking to witness the pretences some birds resort to. My Fiddie, for instance, is a clean small Goldfinch, and paddles in his glass salt-cellar like a little cow, standing there flopping his feet about and making quite a noise; but Dicky, who lives next door, gets sometimes laughed at sadly; because, when Fiddie washes, *he* only fluffs out his feathers, and dipping the extreme point of his bill in water, he shakes and shivers, and finally spreads out his wings to dry, while Fiddie, who is soused honestly, looks much as usual, and I believe laughs at Dicky!

All birds do best in a warm place at night. They cuddle in together, or sleep in nests, or any-

where that they think is warmest. That naughty Master Tommy, of whom you have heard so much, used for some time regularly to disappear at bed-time, and no one could imagine where the small blue bird went. At last, we discovered his chosen warm retreat—fairly rolled up in a window curtain was a small downy ball !

Wrens, and many of these sort of birds who live much in holes, are always very fond of snug corners, with wool to sleep in. And it is half the pleasure of keeping birds at all to see the very odd substitutes that betray their natural habits—I am always amused at the notion of two Parrots who built in a deep barrel, half filled with sawdust, and with a hole at the side, which evidently reminded them of their own hollow trees at home. When a good many birds live together, they help, of course, to keep one another warm. In other cases, certainly, the cages should be covered up carefully at night—and you should be immensely careful to hang them up very high that mice may not get to them ; they terrify birds so much that they sometimes die from the fright, as a great pet of mine did. It is to be remembered, too, that birdseed strewed about attracts mice very much.

There does not seem to me much good in keep-

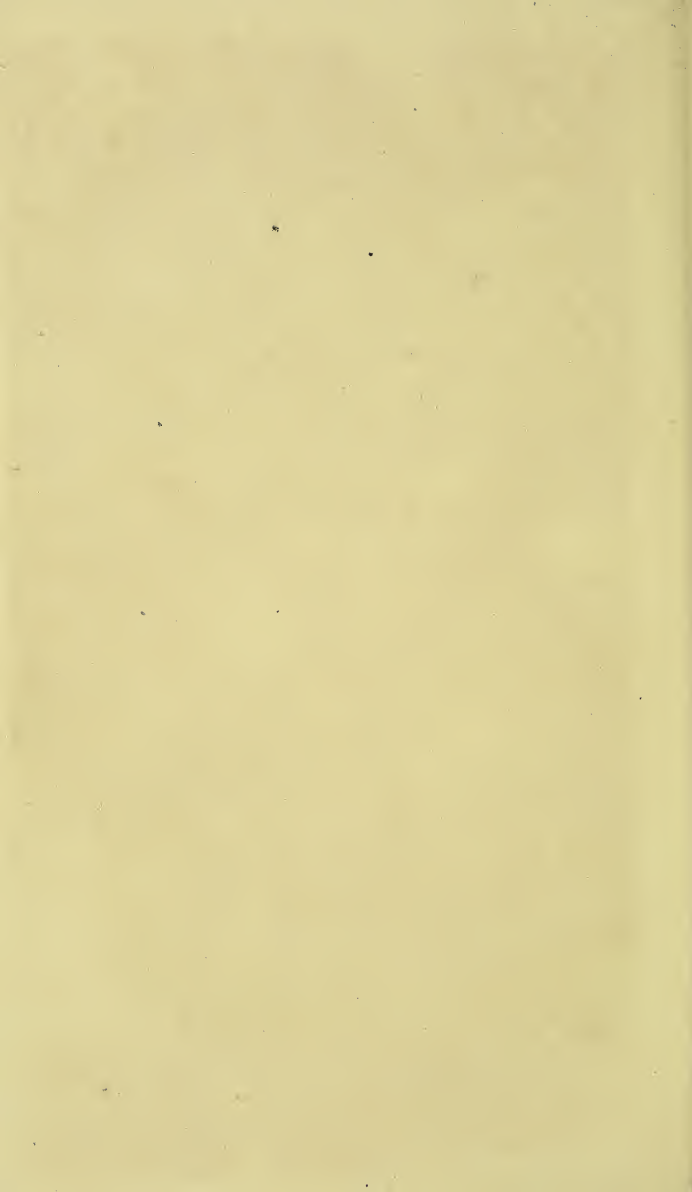
ing cage-birds that need insects for food. It is always very difficult to obtain them in sufficient quantity, and the poor birds in consequence often lead half-starved lives.

The following recipe for German Paste is, however, useful when these birds are kept.

Take a little lard, well washed and free from salt, and put it in a saucepan to melt, and add to it about its own weight of treacle. Stir pea-flour into it till it becomes a thick crumbly mass, and then scatter about it a few poppy seeds.

This food keeps good for months in a closed glass jar.

THE END.



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